

2007 University of Massachusetts Extension Annual Report

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2007 University of Massachusetts Extension Annual Report

I. Report Overview

1. Executive Summary

Organizational Planning and Reporting

In reviewing this report, it is important for CSREES reviewers to be aware that FY 07 was the initial year for a new on line planning and reporting system (<http://www.neprc.net/>) that UMass Extension developed over several years in collaboration with three other New England states (New Hampshire, Maine and Vermont). The system is designed to meet our federal planning and reporting requirements and support transparency, accountability and decision-making throughout the organization.

A key feature of our online system is that it supports the development of organizational plans (and reports) and multiple levels. For FY 07, statewide issues plans were first developed that defined the planned programs included in this federal report. Subsequent plans were then developed at the group-team level and then finally for individual staff. The FY 07 Federal Plan was submitted after our statewide issue plans were developed, but prior to the development of our group-team and individual level plans. As a result, many of the "state defined outputs" and "state defined outcomes" included in this report were developed by teams and individuals and were therefore added as "unintended of previously unknown." For similar reasons, many state defined outputs and outcomes originally defined within the planned programs were not reported against. Finally, several outcomes measures that appear to have been added as "unintended of previously unknown" were simply rewritten to reflect a wholesale change in our approach to reporting, in which all outcome measures are reported as whole numbers, rather than in the proportional terms that some were originally written in.

Our online planning and reporting system, as it relates to "Administrative Plans" must also be noted. Two administrative plans were identified as planned programs (Organizational Development and General Operations and Administration) in our FY 07-11 plan. We were not able to effectively integrate these plans into our online reporting. As a result, the reporting information we have compiled for these two plans is quite limited. We are able to document and report inputs and some outputs associated with our 'Organizational Development' plan. For 'General Operations and Administration' we are only able to report inputs. Suitable outcomes measures could not be effectively conceptualized, captured or reported for either plan. In subsequent federal plans and reports, these two planned programs will be integrated into a single 'Administrative' plan and will be used primarily as a way to designate and track time and effort (inputs) towards administrative functions in support of educational activities and outcomes. We will continue to provide information on key outputs wherever possible, but do not intend to report on any state defined outcomes for the Administrative plan.

As we strive to implement policies and train staff to make optimal and consistent use of our online planning and reporting system, it is clear that key elements will continue to evolve in response to feedback from staff and external reviewers. Nonetheless, we will strive to limit modifications to the structure and function of our system that impact the key elements of planning and reporting (i.e. outputs and outcomes) so that they are expressed through subsequent annual iterations, rather than within a single planning-reporting cycle.

Our Mission

The mission of UMass Extension is to improve the health, well-being and security of youth, families and communities; conserve and enhance natural resources; and strengthen agriculture and food systems. We fulfill our mission by utilizing the research and teaching capacity of the University of Massachusetts Amherst to generate and communicate knowledge while creating approaches, methods, and tools for solving problems. UMass Extension links the Massachusetts land grant university with a larger community of people in collaborative partnerships to address issues of fundamental importance to the people of Massachusetts, New England, and the nation.

UMass Extension Critical Issues

Programs offered by UMass Extension are organized according to seven critical issues. These issues serve as a framework to measure the impact of what we do and communicate the value of our work in ways that are meaningful to a wide variety of internal and external clients and partners. The critical issues for our 2007 plan and report were determined by an extensive process that was designed to assess the priorities and perspectives of broad range of citizens and public stakeholders in ways that are relevant to both USDA Emphasis Areas and the teaching and research capacity of the University of Massachusetts

Amherst. It should also be noted that our critical issues overlap considerably, and that many of our specific projects and initiative will address multiple issues.

Our Critical Issues serve as the basis for the "Planned Programs" described in this Federal Report:

1. Natural Resource-based Economic Development
2. Food Production
3. Water Resource Protection
4. Land Use Management
5. Ecosystem Management, Protection and Restoration
6. Health Promotion and Disease Prevention
7. Youth Development and Engagement

Food Safety was an additional critical issues that was identified through our strategic planning process, prior to the inception of our 5-year (2007-2011) plan. Some key staff transitions in 2006 and 2007 resulted in a lack of capacity to pursue work within this issue area. As a result, we did not report against any of the defined activities and outcomes within this Planned Program Area. UMass Extension will resume consistent educational programming (and reporting) focusing on Food Safety in our 2008 report.

Program Goals

Staff teams with expertise in our Critical Issue areas provide guidance and leadership for the planned programs that are included in this report. Within these planned programs each team identified a set of short-term and medium-term outcomes for the audiences that our programs will target. These outcomes are related to a set of 4 general long-term goals that have been specified at the organizational level.

Stronger Agriculture and Food Systems □ Develop and expand systems for environmentally sound and economically viable food production, distribution, access and utilization.

Improved Human Health and Well-being □ Diverse youth, families, and communities will achieve greater physical and social well-being.

Enhanced Health and Productivity of Natural Resources and Ecosystems □ The quality of land, water, plant, animal, and biodiversity resources will be protected and enhanced, and healthy self-sustaining ecosystems maintained.

Stronger Local Economies □ Natural and human resources will be managed or cultivated in ways that support strong local economies.

Scope of Program and FTE's

FTE's reported in this plan of work include faculty and professional staff supported by Smith Lever 3rd funds and the Family Nutrition Program (FNS Food Stamp Education), as well as contracts, fees and gifts. Specifically, FTE's devoted to EFNEP and FNP represent, in FY07, approximately 26% of total FTE in this plan, working primarily in the Health Promotion planned program area.

Total Actual Amount of professional FTEs/SYs for this State

Year:2007	Extension		Research	
	1862	1890	1862	1890
Plan	104.0	0.0	0.0	0.0
Actual	111.0	0.0	0.0	0.0

II. Merit Review Process

1. The Merit Review Process that was Employed for this year

- Internal University Panel
- External University Panel
- External Non-University Panel

2. Brief Explanation

Internal University Panel

Academic deans and collaborating department heads from the College of Natural Resources and the Environment and the School of Public Health and Health Sciences review our Plan of Work and Annual Report on an annual basis. The Director of the Agricultural Experiment Station and Vice Provost for University Outreach also participate in this annual review.

External Non-University Panel:

The Massachusetts legislature established a Board of Public Overseers to provide advice and oversight to UMass Extension. This 15 member board, comprised of representatives of constituent organizations, meets quarterly to review and advise UMass Extension and the Chancellor the UMass Amherst. Review of the Plan of Work and Annual Report is a major function of this board. For the first time, our annual reports will be posted on line to facilitate review by the Board of Public Overseers.

External University Panel

Massachusetts entered into a formal partnership with Cooperative Extension in Maine, New Hampshire, and Vermont in 2004 to develop and implement a web-based planning and reporting system. As a result of this very successful (and unique) partnership we share a planning and reporting system that allows each of use to view plans and reports of the other states. We have also agreed to provide Merit Review for each other on a rotating basis so that each state in the partnership gets a thorough, expert-review of their state plan of work every four years. In addition to providing feedback to one another, this rotation asks staff to volunteer to be reviewers to look carefully at plans from other states with similar goals and outcomes to their own. For example, 4-H youth development staff in ME, VT, and MA volunteered to review the 4-H youth development plans for NH in 2007 and Agriculture staff reviewed Agriculture plans. This system not only provided New Hampshire with valuable expert-review, but also increased the level of awareness of potential shared programs in neighboring states and helped the reviewers to reflect more critically on their own plans.

New Hampshire was the first state to undergo review in 2007; Vermont will be reviewed in 2008; Maine in 2009 and Massachusetts in 2010. A merit review score sheet was developed jointly so that a similar process would be used for each state. Because New Hampshire was being reviewed, it was our responsibility to provide a list of planned programs and a logical grouping of 2-3 planned programs for a single reviewer to review. This resulted in a single group of reviewers to examine and make comments on only 2 or 3 planned programs in a subject matter they had some knowledge in. The states responsible for the review recruited a team of 2-4 staff members for each grouping. Because the plans were accessible to all staff in the four states through our common planning and reporting system, this made electronic access to the plans they needed to review easy.

Each of the other three reviewing states collected data using a common merit review score sheet, then one person from each of the states summarized reviewer scores and comments and prepared the report for the state being reviewed. The reports are shared with staff who are developing the planned programs and suggestions are incorporated into next year's plan.

III. Stakeholder Input

1. Actions taken to seek stakeholder input that encouraged their participation

- Targeted invitation to traditional stakeholder groups
- Targeted invitation to traditional stakeholder individuals
- Targeted invitation to non-traditional stakeholder individuals
- Survey of traditional stakeholder individuals
- Other (Survey of Potential Faculty Collaborators)

Brief Explanation

To a large extent we are still relying on an extensive statewide stakeholder engagement process conducted in 2006: The key elements of that process were:

Web-based Stakeholder Survey

In March 2006, UMass Extension administered a web-based survey to a broad range of citizens and stakeholders in preparation for the development of a 5-year Plan of Work. The goal of the survey was to obtain information that will help Extension plan and implement programs that are responsive to state and local needs. Through an earlier process, Extension administrators and program leaders identified 8 primary topic areas for the stakeholder survey that were based upon our USDA mission, research and teaching interests of UMass faculty and Extension staff capacity.

Extension professional staff, state and federal agency representatives, and members of our state advisory board were asked to provide email contact information for individuals they work with or know of, who possess comprehensive knowledge and a broad perspective in these eight areas. Seven hundred sixty-eight (768) individuals were contacted via email. Due to breadth of their expertise, some respondents were asked to complete more than one survey, yielding a total of 918 survey requests. It is impossible to know with certainty the exact number of individuals who received these requests. A total of 378 surveys were returned, yielding a (conservative estimated) response rate of 41.2%. These individuals were subsequently sent email messages that directed them to a page on our website where the results from the survey were posted.

Public Forums

UMass Extension sponsored two Public Forums in April 2006 to obtain input for our 5-year Plan of Work. At each forum we solicited comments from citizens we work with, or who are interested in and value our work, to help us plan and implement programs that are responsive to state and local needs. At each event we briefly reviewed our Plan of Work development process and presented results from our online stakeholder survey. Individuals were given up to 5 minutes to deliver comments and also asked to submit copies of their comments in writing. Only six individuals attended these forums and submitted comments, which were directed to our planning teams.

Assessment of UMass Faculty Interests

A consulting team was hired by UMass Extension to conduct the initial part of this assessment. The consultants first reviewed 11 Emphasis Areas specified by the US Department of Agriculture and then conducted a web-scan of university departments and faculty websites. Consultants identified a list of faculty whose interests fit within the USDA areas. Approximately 50 faculty were identified, but due to resource constraints, only 26 interviews were conducted. Priority for interviews was given to faculty with whom we had limited prior experience working directly with. The main purpose of the interview was to understand the applied research interests of each faculty member.

Faculty who we were not able to interview were sent, via email, a request to complete a brief survey which asked them several questions about their work that engages individuals, communities and groups outside the university. Sixty-seven faculty were contacted and responses were received from twenty-five.

A report was issued to summarize information obtained through interviews and surveys of faculty interests. This document has served primarily as an internal resource to UMass Extension planning teams as they developed broad 5-year plans that address critical issues in Massachusetts. In addition to summarizing faculty interests, the document also attempts to summarize ideas faculty have put forth for specific opportunities or approaches that could be enhanced through collaborative efforts with Extension.

Focus Group

UMass Extension conducted a professionally facilitated focus group with our governor-appointed state advisory board (Board of Public Overseers) to deepen our understanding of our stakeholder priorities and the appropriate roles and methods for UMass Extension.

Since our comprehensive stakeholder assessment activities were conducted in 2006, we have continued to work with publically appointed Board of Overseers to obtain their feedback on the issues and programs identified in this report. Furthermore, we intend to develop new stakeholder engagement efforts in conjunction with a strategic planning process to commence in 2008 and to be in effect for our 2010 plan of work.

2(A). A brief statement of the process that was used by the recipient institution to identify individuals and groups stakeholders and to collect input from them

1. Method to identify individuals and groups

- Use Advisory Committees
- Use Internal Focus Groups
- Open Listening Sessions
- Use Surveys
- Other (Hired Independent Consultants)

Brief Explanation

Internal professional staff members and our advisory boards identified a list of 768 stakeholders who received surveys and were invited to public forum. A team of consultants identified existing and potential faculty partners.

2(B). A brief statement of the process that was used by the recipient institution to identify individuals and groups who are stakeholders and to collect input from them

1. Methods for collecting Stakeholder Input

- Survey of traditional Stakeholder individuals
- Meeting specifically with non-traditional groups
- Survey specifically with non-traditional individuals
- Meeting with invited selected individuals from the general public

Brief Explanation

- Large-scale stakeholder surveys were administered via the web.
- Public forums were announced, publicized and conducted.
- Interviews were conducted with faculty in related disciplines and departments

3. A statement of how the input was considered

- To Identify Emerging Issues
- In the Action Plans
- To Set Priorities

Brief Explanation

Extension Planning Teams were established with knowledge and expertise in our seven (7) Critical Issue areas. Team consisted primarily of professional program staff, with some participation by extension administrators and academic faculty. Each team considered the information obtained through the various elements of the Extension Stakeholder Engagement Process as they developed a broad organizational plan (Issue Plan). These Issue Plans were used as the basis for our planned programs in this report. As such, they identify priorities or key focus areas within each issue. Once priorities were established, teams identified outcomes related to these priorities. Outcomes are the changes in behavior or knowledge that should occur if the projects that address this issue are to be effective.

Brief Explanation of what you learned from your Stakeholders

In addition to our seven critical issues, stakeholder feedback helped us to identify "Energy" as an issue that UMass Extension should address, but for which we currently have limited staff capacity: We continue to explore options for developing programming efforts in this and other emerging areas.

IV. Expenditure Summary

1. Total Actual Formula dollars Allocated (prepopulated from C-REEMS)			
Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
2512862	0	0	0

2. Totaled Actual dollars from Planned Programs Inputs				
Extension			Research	
	Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
Actual Formula	2332743	0	0	0
Actual Matching	2840431	0	0	0
Actual All Other	5908468	0	0	0
Total Actual Expended	11081642	0	0	0

3. Amount of Above Actual Formula Dollars Expended which comes from Carryover funds from previous years				
Carryover	0	0	0	0

V. Planned Program Table of Content

S. NO.	PROGRAM NAME
1	Ecosystem Management, Protection And Restoration
2	Food Production
3	Food Safety
4	Health Promotion and Disease Prevention
5	Land Use Management
6	Natural Resource-Based Economic Development
7	Water Resource Protection
8	Youth Development and Engagement
9	Organizational Development (Administrative Plan)
10	General Operations and Administration (Administrative Plan)

Program #1

V(A). Planned Program (Summary)

1. Name of the Planned Program

Ecosystem Management, Protection And Restoration

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
131	Alternative Uses of Land	25%			
133	Pollution Prevention and Mitigation	25%			
135	Aquatic and Terrestrial Wildlife	25%			
136	Conservation of Biological Diversity	25%			
	Total	100%			

V(C). Planned Program (Inputs)

1. Actual amount of professional FTE/SYs expended this Program

Year: 2007	Extension		Research	
	1862	1890	1862	1890
Plan	4.1	0.0	0.0	0.0
Actual	4.5	0.0	0.0	0.0

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
74142	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
183813	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
227708	0	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

Activities

- Single day workshop, class or event
- Facilitated Group Meetings and Conferences
- Consultations and Site Visits
- Websites

2. Brief description of the target audience

•Natural Resource Agencies •Regional Planning Authorities •Development and Planning Agencies
 •Municipalities •Conservation Organizations •Landowners and Land Managers •Business/Industry (Natural resource based businesses, development industry, environmental consultants)

V(E). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons (contacts) reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
Plan	1646	2916	19	0
2007	1191	5300	0	0

2. Number of Patent Applications Submitted (Standard Research Output)

Patent Applications Submitted

Year	Target
Plan:	0
2007 :	0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

	Extension	Research	Total
Plan			
2007	0	0	0

V(F). State Defined Outputs

Output Target

Output #1**Output Measure**

- Single day workshop, class or events

Year	Target	Actual
2007	21	14

Output #2**Output Measure**

- Workshop series or educational course

Year	Target	Actual
2007	84	0

Output #3**Output Measure**

- Facilitated Group Meetings or Conferences

Year	Target	Actual
2007	23	5

Output #4**Output Measure**

- Demonstration Projects

Year	Target	Actual
2007	4	0

Output #5**Output Measure**

- Other personalized interventions or services

Year	Target	Actual
2007	90	0

Output #6**Output Measure**

- Printed material (Newsletter, Manuals, Fact sheets, Calendars)

Year	Target	Actual
2007	32	0

Output #7**Output Measure**

- Websites

Year	Target	Actual
2007	11	3

Output #8**Output Measure**

- Other Computer or web-based Based Delivery (CDs, DVDs, Pod casts)

Year	Target	Actual
2007	9	0

Output #9**Output Measure**

- Displays

Year	Target	Actual
2007	5	0

Output #10**Output Measure**

- Consultations and site visits

Year	Target	Actual
2007	{No Data Entered}	1

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O No.	OUTCOME NAME
1	Number of agencies, organizations and communities that will implement strategic land conservation programs that protect natural resources and ecosystems
2	Number of development projects that will minimize impacts on wildlife populations and ecosystems
3	Number of municipal boards, state and federal regulators that will effectively address natural resource issues during project review and permitting processes
4	Number of natural resource-based businesses will adopt sustainable resource management approaches
5	Number of natural resource-based businesses that will adopt environmental best management practices
6	Number of land managers that will implement practices that maintain a diversity of natural communities and restore degraded ecosystems
7	Number of agencies and organizations (or natural resource professionals) that will implement environmental health monitoring for the early detection of exotic pests, diseases and invasive species
8	Percentage of participants that will select products that reduce risk of invasive species
9	Number of well-screened bio-control agents that will be developed and deployed to control invasive species and protect native organisms and ecosystems
10	Percentage of participants that will implement integrated management strategies to contain and manage exotic pests, diseases and invasive species
11	Individuals acquire knowledge and skills for integrated management strategies that contain and manage exotic pests, diseases and invasive species
12	Agencies, organizations and natural resource professionals have the knowledge, skills and motivation necessary to conduct scientifically valid monitoring of water bodies for invasive species
13	Integrated management strategies implemented to contain and manage exotic pests, diseases and invasive species
14	Forest landowners and natural resource-based businesses have the knowledge, skills and motivation necessary to adopt sustainable approaches to resource management and environmental best management practices
15	Participants acquire knowledge and skills necessary to implement environmental best management practices in operating Natural Resource-based businesses
16	Individuals acquire the knowledge and skills needed to adopt research-based Best Management Practices related to water, soil, air, and integrated crop and animal management practices
17	Individuals, businesses and agencies have the knowledge, skills and motivation to choose technologies and/or development approaches that minimize impact to water resources and ecosystems
18	Land owners and land managers have an appreciation for the need to conserve biodiversity and use an ecosystems approach to land protection and management
19	Land owners understand their options for conservation of their land, including who to contact for help
20	Agencies, organizations and communities have the knowledge and skills necessary to implement strategic land conservation programs that protect natural resources and ecosystems

Outcome #1**1. Outcome Measures**

Number of agencies, organizations and communities that will implement strategic land conservation programs that protect natural resources and ecosystems

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	5	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

{No Data Entered}

What has been done

{No Data Entered}

Results

{No Data Entered}

4. Associated Knowledge Areas

KA Code	Knowledge Area
	{No Data}

Outcome #2**1. Outcome Measures**

Number of development projects that will minimize impacts on wildlife populations and ecosystems

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	5	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

{No Data Entered}

What has been done

{No Data Entered}

Results

{No Data Entered}

4. Associated Knowledge Areas

KA Code	Knowledge Area
{No Data}	

Outcome #3**1. Outcome Measures**

Number of municipal boards, state and federal regulators that will effectively address natural resource issues during project review and permitting processes

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	5	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

{No Data Entered}

What has been done

{No Data Entered}

Results

{No Data Entered}

4. Associated Knowledge Areas

KA Code	Knowledge Area
{No Data}	

Outcome #4**1. Outcome Measures**

Number of natural resource-based businesses will adopt sustainable resource management approaches

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	5	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

{No Data Entered}

What has been done

{No Data Entered}

Results

{No Data Entered}

4. Associated Knowledge Areas**KA Code Knowledge Area**

{No Data}

Outcome #5**1. Outcome Measures**

Number of natural resource-based businesses that will adopt environmental best management practices

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	5	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

{No Data Entered}

What has been done

{No Data Entered}

Results

{No Data Entered}

4. Associated Knowledge Areas**KA Code Knowledge Area**

{No Data}

Outcome #6**1. Outcome Measures**

Number of land managers that will implement practices that maintain a diversity of natural communities and restore degraded ecosystems

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	5	26

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
131	Alternative Uses of Land
136	Conservation of Biological Diversity
133	Pollution Prevention and Mitigation
135	Aquatic and Terrestrial Wildlife

Outcome #7

1. Outcome Measures

Number of agencies and organizations (or natural resource professionals) that will implement environmental health monitoring for the early detection of exotic pests, diseases and invasive species

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	5	735

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Natural resource professional, policy-makers, scientists and the general public share a common interest in the avoidance, detection, early containment, and management of exotic pests, diseases, and invasive species.

Exotic pests, diseases and invasive species are among the most profound threats to ecosystem integrity that we face. The number of invasive species already creating problems in Massachusetts is large and the potential for future problems is significant. Invasive species typically are habitat generalists and aggressive colonizers and outbreaks are difficult to contain and almost impossible to eliminate unless discovered and addressed early in the invasion. Biological control offers hope for the long-term containment of invasive species. However, careful screening of potential bio-control agents is essential lest the agent itself become a threat to ecosystem integrity.

Exotic pests, diseases and invasive species are among the most profound threats to ecosystem integrity that we face. The number of invasive species already creating problems in Massachusetts is large and the potential for future problems is significant. Invasive species typically are habitat generalists and aggressive colonizers and outbreaks are difficult to contain and almost impossible to eliminate unless discovered and addressed early in the invasion. Biological control offers hope for the long-term containment of invasive species. However, careful screening of potential bio-control agents is essential lest the agent itself become a threat to ecosystem integrity.

What has been done

UMass Amherst possesses significant research capacity in the area of insect pests and the development and use of biological control to address the threats caused by these pests. Established agricultural, green industry and forestry extension programs delivered research-based information to individuals about action that can be taken to avoid, detect and control invasive species.

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
135	Aquatic and Terrestrial Wildlife
136	Conservation of Biological Diversity

Outcome #8

1. Outcome Measures

Percentage of participants that will select products that reduce risk of invasive species

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	40	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

{No Data Entered}

What has been done

{No Data Entered}

Results

{No Data Entered}

4. Associated Knowledge Areas

KA Code	Knowledge Area
{No Data}	

Outcome #9**1. Outcome Measures**

Number of well-screened bio-control agents that will be developed and deployed to control invasive species and protect native organisms and ecosystems

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	3	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

{No Data Entered}

What has been done

{No Data Entered}

Results

{No Data Entered}

4. Associated Knowledge Areas

KA Code	Knowledge Area
{No Data}	

Outcome #10**1. Outcome Measures**

Percentage of participants that will implement integrated management strategies to contain and manage exotic pests, diseases and invasive species

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	30	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

{No Data Entered}

What has been done

{No Data Entered}

Results

{No Data Entered}

4. Associated Knowledge Areas**KA Code Knowledge Area**

{No Data}

Outcome #11**1. Outcome Measures**

Individuals acquire knowledge and skills for integrated management strategies that contain and manage exotic pests, diseases and invasive species

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	{No Data Entered}	2780

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)****What has been done****Results****4. Associated Knowledge Areas**

KA Code	Knowledge Area
136	Conservation of Biological Diversity

Outcome #12**1. Outcome Measures**

Agencies, organizations and natural resource professionals have the knowledge, skills and motivation necessary to conduct scientifically valid monitoring of water bodies for invasive species

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	{No Data Entered}	311

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Natural resource professional, policy-makers, scientists and the general public share a common interest in the avoidance, detection, early containment, and management of exotic pests, diseases, and invasive species.

What has been done

UMass Amherst possesses significant research capacity in the area of insect pests and the development and use of biological control to address the threats caused by these pests. Established agricultural, green industry and forestry extension programs delivered research-based information to individuals about action that can be taken to avoid, detect and control invasive species

Results**4. Associated Knowledge Areas**

KA Code	Knowledge Area
135	Aquatic and Terrestrial Wildlife
136	Conservation of Biological Diversity

Outcome #13**1. Outcome Measures**

Integrated management strategies implemented to contain and manage exotic pests, diseases and invasive species

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	{No Data Entered}	350

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Natural resource professional, policy-makers, scientists and the general public share a common interest in the avoidance, detection, early containment, and management of exotic pests, diseases, and invasive species.

What has been done

UMass Amherst possesses significant research capacity in the area of insect pests and the development and use of biological control to address the threats caused by these pests. Established agricultural, green industry and forestry extension programs delivered research-based information to individuals about action that can be taken to avoid, detect and control invasive species.

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
136	Conservation of Biological Diversity

Outcome #14**1. Outcome Measures**

Forest landowners and natural resource-based businesses have the knowledge, skills and motivation necessary to adopt sustainable approaches to resource management and environmental best management practices

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	{No Data Entered}	845

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Forests provide ecosystem services including climate regulation, freshwater supply, stormwater mitigation, nutrient regulation, biodiversity, soil retention and aesthetics valued at \$2.9 billion according to Mass Audubon (2003). In landscapes dominated by small, private forest ownership, these critical ecosystem services are provided free of charge by family forest owners to the general public. Everyday, Massachusetts loses over 40 acres of open space (MA Audubon, 2003). The average age of these forest land owners is approximately 60 years. A significant portion of this land will be transferring ownership or generations over the coming years. To safeguard the future sustainability of public benefits from these private forest landscapes, it is imperative that family forest owners make informed decisions about their woodlands.

What has been done

The UMass Extension Forest Conservation has put into place in each community the people that can deliver accurate information at crucial decision making times. We recognize that networks of respected community leaders is one of the most effective ways of spreading information and assisting peers and communities to make informed decisions about their forest resources. Internet based tools have assisted in the development of these networks and also serve to provide information on people and resources to assist landowners and communities in their conservation decisions.

Results**4. Associated Knowledge Areas**

KA Code	Knowledge Area
135	Aquatic and Terrestrial Wildlife
131	Alternative Uses of Land
136	Conservation of Biological Diversity

Outcome #15**1. Outcome Measures**

Participants acquire knowledge and skills necessary to implement environmental best management practices in operating Natural Resource-based businesses

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	{No Data Entered}	440

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)****What has been done****Results****4. Associated Knowledge Areas**

KA Code	Knowledge Area
131	Alternative Uses of Land
133	Pollution Prevention and Mitigation
136	Conservation of Biological Diversity
135	Aquatic and Terrestrial Wildlife

Outcome #16**1. Outcome Measures**

Individuals acquire the knowledge and skills needed to adopt research-based Best Management Practices related to water, soil, air, and integrated crop and animal management practices

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	{No Data Entered}	628

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

People who manage natural systems with the primary goal of protecting or restoring the health of ecosystems need up-to-date information on ecosystems and ecological processes, as well as tools and approaches for land protection and management to achieve their goals. Other audiences engaged in the management of natural systems for multiple objectives, including the harvesting of resources as well as the protection of environmental quality, need information on sustainable resource management and best management practices. Land managers that are managing land-based production systems (agriculture) and highly managed landscapes (golf courses) need information on practices that limit the unintended consequences of management practices on nearby natural

What has been done

Working with people who own and manage both land and the resources supported by the land is a critical element of ecosystem management, protection and restoration. UMass Amherst has substantial research capacity in the management of agricultural land and intensively managed landscapes, as well as forest, freshwater and coastal ecosystems. UMass Extension provides programs that provide information and technical assistance to a variety of audiences that work directly with the land and its resource systems.

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
133	Pollution Prevention and Mitigation
136	Conservation of Biological Diversity
131	Alternative Uses of Land
135	Aquatic and Terrestrial Wildlife

Outcome #17

1. Outcome Measures

Individuals, businesses and agencies have the knowledge, skills and motivation to choose technologies and/or development approaches that minimize impact to water resources and ecosystems

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	{No Data Entered}	320

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
131	Alternative Uses of Land
133	Pollution Prevention and Mitigation
135	Aquatic and Terrestrial Wildlife
136	Conservation of Biological Diversity

Outcome #18

1. Outcome Measures

Land owners and land managers have an appreciation for the need to conserve biodiversity and use an ecosystems approach to land protection and management

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	{No Data Entered}	269

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

People who manage natural systems with the primary goal of protecting or restoring the health of ecosystems need up-to-date information on ecosystems and ecological processes, as well as tools and approaches for land protection and management to achieve their goals. Other audiences engaged in the management of natural systems for multiple objectives, including the harvesting of resources as well as the protection of environmental quality, need information on sustainable resource management and best management practices. Land managers that are managing land-based production systems (agriculture) and highly managed landscapes (golf courses) need information on practices that limit the unintended consequences of management practices on nearby natural systems.

What has been done

UMass Amherst has substantial research capacity in the management of agricultural land and intensively managed landscapes, as well as forest, freshwater and coastal ecosystems. UMass Extension provides programs that provide information and technical assistance to a variety of audiences that work directly with the land and its resources.

Results**4. Associated Knowledge Areas**

KA Code	Knowledge Area
136	Conservation of Biological Diversity
131	Alternative Uses of Land

Outcome #19**1. Outcome Measures**

Land owners understand their options for conservation of their land, including who to contact for help

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	{No Data Entered}	1325

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)****What has been done****Results**

4. Associated Knowledge Areas

KA Code	Knowledge Area
136	Conservation of Biological Diversity
131	Alternative Uses of Land

Outcome #20**1. Outcome Measures**

Agencies, organizations and communities have the knowledge and skills necessary to implement strategic land conservation programs that protect natural resources and ecosystems

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	{No Data Entered}	1954

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
136	Conservation of Biological Diversity
135	Aquatic and Terrestrial Wildlife
131	Alternative Uses of Land

V(H). Planned Program (External Factors)**External factors which affected outcomes**

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Appropriations changes
- Public Policy changes
- Government Regulations
- Competing Public priorities
- Competing Programmatic Challenges

Brief Explanation**V(I). Planned Program (Evaluation Studies and Data Collection)****1. Evaluation Studies Planned**

- After Only (post program)

Evaluation Results

Key Items of Evaluation

Program #2

V(A). Planned Program (Summary)

1. Name of the Planned Program

Food Production

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
112	Watershed Protection and Management	15%			
204	Plant Product Quality and Utility (Preharvest)	15%			
216	Integrated Pest Management Systems	20%			
601	Economics of Agricultural Production and Farm Management	20%			
604	Marketing and Distribution Practices	15%			
723	Hazards to Human Health and Safety	15%			
Total		100%			

V(C). Planned Program (Inputs)

1. Actual amount of professional FTE/SYs expended this Program

Year: 2007	Extension		Research	
	1862	1890	1862	1890
Plan	5.3	0.0	0.0	0.0
Actual	7.5	0.0	0.0	0.0

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
123571	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
306352	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
379514	0	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

- Consultations and Site Visits
- Workshop Series or Educational Course
- Diagnostic Services
- Website
- Printed Materials
- Single Day Workshop, Class or Event
- Other Computer or Web-based Delivery (CDs, DVDs, Podcasts)
- Facilitated Group Meetings and Conferences

Most activities involve farmer education through written and electronic materials (manuals, newsletters, faxes, emails, web pages). In addition, educational sessions and conferences, on-farm meetings, and face-to-face discussions are used.

Managing the food security issue will involve collaborative efforts among farmers, community based organizations such as food banks and food pantries, and human service agencies that assist low-income families. This, most likely, will be in the form of a face-to-face meeting and combined efforts to pursue external funding to support such an endeavor. It is recommended that such an approach be piloted in specific region of state, such as western MA before it becomes a statewide initiative.

Managing the farm to school initiative will also involve collaborative efforts among schools, the agricultural community and local community based organizations such as CISA, to determine how local produce is currently being distributed and strategies for increasing its utilization.

2. Brief description of the target audience

The primary audience for this plan is food producers and food production-related organizations. This not only includes those that are well-established, but also those that are new, immigrant, and part-time. Both conventional and organic food producers are included. Others include government agencies (including schools and institutions), non-profits, community based organizations, such as food pantries, food banks, that provide food to low-income families, and the public (including low income and urban).

V(E). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons (contacts) reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
Plan	4952	13265	55	0
2007	2124	28491	0	0

2. Number of Patent Applications Submitted (Standard Research Output)

Patent Applications Submitted

Year	Target
Plan:	0
2007 :	0

Patents listed

3. Publications (Standard General Output Measure)**Number of Peer Reviewed Publications**

	Extension	Research	Total
Plan			
2007	0	0	0

V(F). State Defined Outputs**Output Target**

Output #1**Output Measure**

- Single day workshop, class or events

Year	Target	Actual
2007	15	9

Output #2**Output Measure**

- Workshop series or educational course

Year	Target	Actual
2007	50	42

Output #3**Output Measure**

- Facilitated Group Meetings or Conferences

Year	Target	Actual
2007	12	4

Output #4**Output Measure**

- Demonstration Projects

Year	Target	Actual
2007	10	0

Output #5**Output Measure**

- Diagnostic Services

Year	Target	Actual
2007	100	680

Output #6**Output Measure**

- Site visits

Year	Target	Actual
2007	20	37

Output #7**Output Measure**

- Other personalized interventions or services

Year	Target	Actual
2007	30	0

Output #8**Output Measure**

- Printed material (Newsletter, Manuals, Fact sheets, Calendars)

Year	Target	Actual
2007	58	43

Output #9**Output Measure**

- Websites

Year	Target	Actual
2007	6	90

Output #10**Output Measure**

- Other Computer or web-based Based Delivery (CDs, DVDs, Pod casts)

Year	Target	Actual
2007	10	14

Output #11**Output Measure**

- Displays

Year	Target	Actual
2007	5	0

Output #12

Output Measure

- Scholarship - Printed Materials

Year	Target	Actual
2007	{No Data Entered}	2

V(G). State Defined Outcomes**V. State Defined Outcomes Table of Content**

O No.	OUTCOME NAME
1	Percentage of participants that will adopt research-based Best Management Practices related to water, soil, air, and integrated crop and animal management practices
2	Percentage of participants that will adopt practices that lower their risk from and exposure to pesticides and fertilizers
3	Percentage of participants that will improve production efficiencies through education, technology transfer, and by adopting new and innovative practices
4	Percentage of participants that will increase profitability through improved post harvest efficiencies, packaging, and marketing techniques
5	Percentage of participants that will pursue a broader range of sales and marketing opportunities
6	Number of stakeholders that will expand access to and reliance on local foods by individuals and families and institutions through collaboration, education, expanding retail opportunities, and donations
7	Commercial farmers and food producers pursue a broader range of sales and marketing opportunities
8	Food producers adopt research-based Best Management Practices related to water, soil, air, and integrated crop and animal management practices
9	Food producers improve production efficiencies through education, technology transfer, and by adopting new and innovative practices
10	Individuals who use pesticides adopt practices that lower their risk from and exposure to pesticides and fertilizers
11	Commercial farmers and food producers acquire the knowledge and skills to better pursue a broader range of sales and marketing opportunities
12	Food producers acquire knowledge and skills to improve production efficiencies through education, technology transfer, and adopting new and innovative practices
13	Food producers acquire the knowledge and skills needed to implement research-based Best Management Practices related to water, soil, air and integrated crop and animal management practices
14	Food producers acquire the knowledge and skills to adopt research-based Best Management Practices related to water, soil, air, and integrated crop and animal management practices
15	Food producers acquire the knowledge and skills to increase profitability through improved post harvest efficiencies, packaging, and marketing techniques

Outcome #1**1. Outcome Measures**

Percentage of participants that will adopt research-based Best Management Practices related to water, soil, air, and integrated crop and animal management practices

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	40	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

{No Data Entered}

What has been done

{No Data Entered}

Results

{No Data Entered}

4. Associated Knowledge Areas

KA Code	Knowledge Area
	{No Data}

Outcome #2**1. Outcome Measures**

Percentage of participants that will adopt practices that lower their risk from and exposure to pesticides and fertilizers

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	40	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

{No Data Entered}

What has been done

{No Data Entered}

Results

{No Data Entered}

4. Associated Knowledge Areas

KA Code	Knowledge Area
{No Data}	

Outcome #3**1. Outcome Measures**

Percentage of participants that will improve production efficiencies through education, technology transfer, and by adopting new and innovative practices

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	40	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

{No Data Entered}

What has been done

{No Data Entered}

Results

{No Data Entered}

4. Associated Knowledge Areas

KA Code	Knowledge Area
{No Data}	

Outcome #4**1. Outcome Measures**

Percentage of participants that will increase profitability through improved post harvest efficiencies, packaging, and marketing techniques

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	40	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

{No Data Entered}

What has been done

{No Data Entered}

Results

{No Data Entered}

4. Associated Knowledge Areas**KA Code Knowledge Area**

{No Data}

Outcome #5**1. Outcome Measures**

Percentage of participants that will pursue a broader range of sales and marketing opportunities

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	40	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

{No Data Entered}

What has been done

{No Data Entered}

Results

{No Data Entered}

4. Associated Knowledge Areas**KA Code Knowledge Area**

{No Data}

Outcome #6**1. Outcome Measures**

Number of stakeholders that will expand access to and reliance on local foods by individuals and families and institutions through collaboration, education, expanding retail opportunities, and donations

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	5	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

{No Data Entered}

What has been done

{No Data Entered}

Results

{No Data Entered}

4. Associated Knowledge Areas**KA Code Knowledge Area**

{No Data}

Outcome #7**1. Outcome Measures**

Commercial farmers and food producers pursue a broader range of sales and marketing opportunities

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	{No Data Entered}	230

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Since 1997, the overall number, acreage and cash receipts of Massachusetts farms have declined (by 17%, 10% and 21% respectively). Of the remaining farms (more than 6,000), 80% are still family owned and most of these fit the definition of 'small farms' as expressed by the US Department Agriculture. The average farm in Massachusetts is only 85 acres. Farmers therefore need to manage for high returns on their investment per acre. Aside from traditional agricultural products, Massachusetts farmers have expanded their offerings to include farmstead-made cheeses, maple syrup, wine, cranberries and exotic livestock, which together present tremendous, statewide financial growth potential. Farms and other food production operations can add significantly to the quality of life in Massachusetts and New England. The most obvious contribution is to open space through their scenic and historic vistas, but it is also well known that regular consumption of fruits, vegetables, meat, and dairy products leads to better human health.

What has been done

UMass Extension provides farmers and other food producers with ready access to current research information on marketing, post-harvest efficiencies, packaging and business management strategies. In addition, research programs in the physiological management of crops and animals give food producers the tools that are necessary to increase production efficiency while enhancing crop and animal quality.

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
604	Marketing and Distribution Practices
601	Economics of Agricultural Production and Farm Management

Outcome #8

1. Outcome Measures

Food producers adopt research-based Best Management Practices related to water, soil, air, and integrated crop and animal management practices

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	{No Data Entered}	1250

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

For farmers and other food producers to stay in business, it is necessary that they maintain long-term environmental sustainability by striving to expand species diversity and better understand farm ecology.

What has been done

UMass Extension provides access to current research information on new and alternative species and varieties, advanced horticultural management techniques, pest-ecology, and pest-management procedures. Important studies of pest ecology and control techniques provide approaches to pest management that optimize pest control, reduce chemical use, and increase crop and animal quality.

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
601	Economics of Agricultural Production and Farm Management
216	Integrated Pest Management Systems

Outcome #9

1. Outcome Measures

Food producers improve production efficiencies through education, technology transfer, and by adopting new and innovative practices

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	{No Data Entered}	352

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

We are facing intense global competition for the products that are grown or produced in Massachusetts. Improved production efficiency, new marketing opportunities, and constant evaluation of profitability are needed to ensure survival.

What has been done

UMass Extension provides farmers and other food producers with ready access to current research information on marketing, post-harvest efficiencies, packaging and business management strategies. In addition, research programs in the physiological management of crops and animals give food producers the tools that are necessary to increase production efficiency while enhancing crop and animal quality.

Results**4. Associated Knowledge Areas**

KA Code	Knowledge Area
204	Plant Product Quality and Utility (Preharvest)
601	Economics of Agricultural Production and Farm Management

Outcome #10**1. Outcome Measures**

Individuals who use pesticides adopt practices that lower their risk from and exposure to pesticides and fertilizers

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	{No Data Entered}	1070

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

UMass Extension has a memorandum of understanding with the Massachusetts Department of Agricultural Resources, the United States Department of Agriculture and the U.S. Environmental Protection Agency to provide initial and continuing education to pesticide users. Pesticides are important tools for the management of pests that threatened the food supply, public health and natural resources. Unfortunately, these chemicals can also pose a threat to the human health and the environment if they are not used properly.

What has been done

The UMass Extension Pesticide Education works closely with the Massachusetts Department of Agricultural Resources to insure that pesticide users are provided with opportunities to obtain necessary information about the regulation and proper use of pesticides in the state. The team conducts workshops throughout the state for users of pesticides including farmers, landscapers, turf and lawn managers, municipal and state employees, indoor pest management professionals and the general public. Additional education and information are made available in publications, newsletters, conferences, lectures, and websites.

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
216	Integrated Pest Management Systems
723	Hazards to Human Health and Safety

Outcome #11

1. Outcome Measures

Commercial farmers and food producers acquire the knowledge and skills to better pursue a broader range of sales and marketing opportunities

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	{No Data Entered}	100

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
601	Economics of Agricultural Production and Farm Management
604	Marketing and Distribution Practices

Outcome #12

1. Outcome Measures

Food producers acquire knowledge and skills to improve production efficiencies through education, technology transfer, and adopting new and innovative practices

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	{No Data Entered}	740

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

We are facing intense global competition for the products that are grown or produced in Massachusetts. Improved production efficiency, new marketing opportunities, and constant evaluation of profitability are needed to ensure survival.

What has been done

Farmers and other food producers are provided with ready access to current research information on marketing, post-harvest efficiencies, packaging and business management strategies. In addition, research programs in the physiological management of crops and animals can give food producers the tools that are necessary to increase production efficiency while enhancing crop and animal quality

Results**4. Associated Knowledge Areas**

KA Code	Knowledge Area
601	Economics of Agricultural Production and Farm Management
604	Marketing and Distribution Practices

Outcome #13**1. Outcome Measures**

Food producers acquire the knowledge and skills needed to implement research-based Best Management Practices related to water, soil, air and integrated crop and animal management practices

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	{No Data Entered}	500

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)****What has been done****Results****4. Associated Knowledge Areas**

KA Code	Knowledge Area
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216	Integrated Pest Management Systems
112	Watershed Protection and Management

Outcome #14**1. Outcome Measures**

Food producers acquire the knowledge and skills to adopt research-based Best Management Practices related to water, soil, air, and integrated crop and animal management practices

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	{No Data Entered}	1600

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
216	Integrated Pest Management Systems
604	Marketing and Distribution Practices
601	Economics of Agricultural Production and Farm Management
112	Watershed Protection and Management
204	Plant Product Quality and Utility (Preharvest)

Outcome #15**1. Outcome Measures**

Food producers acquire the knowledge and skills to increase profitability through improved post harvest efficiencies, packaging, and marketing techniques

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	{No Data Entered}	100

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
604	Marketing and Distribution Practices
601	Economics of Agricultural Production and Farm Management

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Appropriations changes
- Public Policy changes
- Government Regulations
- Competing Public priorities
- Competing Programmatic Challenges
- Populations changes (immigration, new cultural groupings, etc.)

Brief Explanation

V(I). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned

- Retrospective (post program)
- During (during program)

Evaluation Results

Key Items of Evaluation

Program #3

V(A). Planned Program (Summary)

1. Name of the Planned Program

Food Safety

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
711	Ensure Food Products Free of Harmful Chemicals, Including Residues from Agricultural and Other Sourc	10%			
712	Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occurring Toxins	60%			
723	Hazards to Human Health and Safety	30%			
Total		100%			

V(C). Planned Program (Inputs)

1. Actual amount of professional FTE/SYs expended this Program

Year: 2007	Extension		Research	
	1862	1890	1862	1890
Plan	4.5	0.0	0.0	0.0
Actual	{NO DATA ENTERED}	{NO DATA ENTERED}	{NO DATA ENTERED}	{NO DATA ENTERED}

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
{NO DATA ENTERED}	{NO DATA ENTERED}	{NO DATA ENTERED}	{NO DATA ENTERED}
1862 Matching	1890 Matching	1862 Matching	1890 Matching
{NO DATA ENTERED}	{NO DATA ENTERED}	{NO DATA ENTERED}	{NO DATA ENTERED}
1862 All Other	1890 All Other	1862 All Other	1890 All Other
{NO DATA ENTERED}	{NO DATA ENTERED}	{NO DATA ENTERED}	{NO DATA ENTERED}

V(D). Planned Program (Activity)

1. Brief description of the Activity

•Workshops (includes train-the-trainer workshops and workshop series) •Printed materials (includes materials printed specifically for low-literacy and non-English-speaking groups) •Online resources •curriculum •Collaborations

2. Brief description of the target audience

•High-risk consumers, including older adults, parents of young children, pregnant women, and immuno-compromised persons •Family members and individuals who provide care to these audiences.
 •Teachers •Food service staff and other food handlers (such as workers in soup kitchens or food pantries)
 •Food producers •Other professionals working in food safety (through collaborations and networks) •Youth

V(E). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons (contacts) reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
Plan	9577	12863	0	0
2007	0	0	0	0

2. Number of Patent Applications Submitted (Standard Research Output)

Patent Applications Submitted

Year Target

Plan: 0

2007 : {No Data Entered}

Patents listed

{No Data Entered}

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

	Extension	Research	Total
Plan			
2007	{No Data Entered}	{No Data Entered}	0

V(F). State Defined Outputs

Output Target

Output #1**Output Measure**

- Single day workshop, class or events

Year	Target	Actual
2007	100	0

Output #2**Output Measure**

- Workshop series or educational course

Year	Target	Actual
2007	100	0

Output #3**Output Measure**

- Facilitated Group Meetings or Conferences

Year	Target	Actual
2007	2	0

Output #4**Output Measure**

- Demonstration Projects

Year	Target	Actual
2007	10	0

Output #5**Output Measure**

- Other personalized interventions or services

Year	Target	Actual
2007	40	0

Output #6**Output Measure**

- Printed material (Newsletters, Manuals, Fact sheets, Calendars)

Year	Target	Actual
2007	30	0

Output #7**Output Measure**

- Displays

Year	Target	Actual
2007	10	0

Output #8**Output Measure**

- Websites

Year	Target	Actual
2007	2	0

V(G). State Defined Outcomes**V. State Defined Outcomes Table of Content**

O No.	OUTCOME NAME
1	Percentage of participants that will increase their knowledge of safe food handling
2	Percentage of participants that will handle foods more safely
3	Percentage of participants that will gain knowledge and skills in avoiding food allergens
4	Percentage of participants that will avoid foods that cause them to have allergic reactions
5	Percentage of participants that will increase their personal knowledge of food safety
6	Percentage of participants that will teach principles of food safety in their science classrooms
7	Percentage of participants that will increase their knowledge of basic food safety principles
8	Percentage of participants that will handle foods more safely
9	Percentage of participants entering food industries that will handle foods and equipment more safely
10	Percentage of participants receiving food safety training, including individuals with language or literacy barriers, that will increase their knowledge and skills in safe food and equipment handling
11	Percentage of participants who receive food safety training, including individuals with language or literacy barriers, that will handle foods and equipment more safely

Outcome #1**1. Outcome Measures**

Percentage of participants that will increase their knowledge of safe food handling

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	50	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

{No Data Entered}

What has been done

{No Data Entered}

Results

{No Data Entered}

4. Associated Knowledge Areas

KA Code	Knowledge Area
{No Data}	

Outcome #2**1. Outcome Measures**

Percentage of participants that will handle foods more safely

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	40	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

{No Data Entered}

What has been done

{No Data Entered}

Results

{No Data Entered}

4. Associated Knowledge Areas

KA Code	Knowledge Area
{No Data}	

Outcome #3**1. Outcome Measures**

Percentage of participants that will gain knowledge and skills in avoiding food allergens

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	50	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

{No Data Entered}

What has been done

{No Data Entered}

Results

{No Data Entered}

4. Associated Knowledge Areas

KA Code	Knowledge Area
{No Data}	

Outcome #4**1. Outcome Measures**

Percentage of participants that will avoid foods that cause them to have allergic reactions

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	40	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

{No Data Entered}

What has been done

{No Data Entered}

Results

{No Data Entered}

4. Associated Knowledge Areas**KA Code Knowledge Area**

{No Data}

Outcome #5**1. Outcome Measures**

Percentage of participants that will increase their personal knowledge of food safety

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	50	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

{No Data Entered}

What has been done

{No Data Entered}

Results

{No Data Entered}

4. Associated Knowledge Areas**KA Code Knowledge Area**

{No Data}

Outcome #6**1. Outcome Measures**

Percentage of participants that will teach principles of food safety in their science classrooms

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	40	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

{No Data Entered}

What has been done

{No Data Entered}

Results

{No Data Entered}

4. Associated Knowledge Areas

KA Code	Knowledge Area
{No Data}	

Outcome #7**1. Outcome Measures**

Percentage of participants that will increase their knowledge of basic food safety principles

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	50	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

{No Data Entered}

What has been done

{No Data Entered}

Results

{No Data Entered}

4. Associated Knowledge Areas

KA Code	Knowledge Area
{No Data}	

Outcome #8**1. Outcome Measures**

Percentage of participants that will handle foods more safely

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	40	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

{No Data Entered}

What has been done

{No Data Entered}

Results

{No Data Entered}

4. Associated Knowledge Areas

KA Code	Knowledge Area
{No Data}	

Outcome #9**1. Outcome Measures**

Percentage of participants entering food industries that will handle foods and equipment more safely

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	40	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

{No Data Entered}

What has been done

{No Data Entered}

Results

{No Data Entered}

4. Associated Knowledge Areas

KA Code	Knowledge Area
{No Data}	

Outcome #10

1. Outcome Measures

Percentage of participants receiving food safety training, including individuals with language or literacy barriers, that will increase their knowledge and skills in safe food and equipment handling

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	50	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

{No Data Entered}

What has been done

{No Data Entered}

Results

{No Data Entered}

4. Associated Knowledge Areas

KA Code	Knowledge Area
	{No Data}

Outcome #11**1. Outcome Measures**

Percentage of participants who receive food safety training, including individuals with language or literacy barriers, that will handle foods and equipment more safely

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	40	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

{No Data Entered}

What has been done

{No Data Entered}

Results

{No Data Entered}

4. Associated Knowledge Areas

KA Code	Knowledge Area
{No Data}	

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Appropriations changes
- Public Policy changes
- Competing Public priorities
- Competing Programmatic Challenges

Brief Explanation

{No Data Entered}

V(I). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned

- After Only (post program)
- Retrospective (post program)
- Before-After (before and after program)
- Case Study

Evaluation Results

{No Data Entered}

Key Items of Evaluation

{No Data Entered}

Program #4

V(A). Planned Program (Summary)

1. Name of the Planned Program

Health Promotion and Disease Prevention

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
703	Nutrition Education and Behavior	40%			
704	Nutrition and Hunger in the Population	10%			
723	Hazards to Human Health and Safety	10%			
724	Healthy Lifestyle	40%			
	Total	100%			

V(C). Planned Program (Inputs)

1. Actual amount of professional FTE/SYs expended this Program

Year: 2007	Extension		Research	
	1862	1890	1862	1890
Plan	23.7	0.0	0.0	0.0
Actual	36.5	0.0	0.0	0.0

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
39017	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
219237	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
2369005	0	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

Activities

- Workshop Series or Educational Course

- Displays

- Printed Materials

- Demonstrations

- Single Day Workshop, Class or Event

2. Brief description of the target audience

- Adults •Youth •Women •Minority and underserved populations •Health educators and providers
- Teachers •UMass faculty, students and administration •State and local agencies •State legislators

V(E). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons (contacts) reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
Plan	7388	144874	143754	71179
2007	15890	71899	53748	19039

2. Number of Patent Applications Submitted (Standard Research Output)

Patent Applications Submitted

Year	Target
Plan:	0
2007 :	0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

	Extension	Research	Total
Plan			
2007	0	0	0

V(F). State Defined Outputs

Output Target

Output #1**Output Measure**

- Single day workshop, class or events

Year	Target	Actual
2007	520	536

Output #2**Output Measure**

- Workshop series or educational course

Year	Target	Actual
2007	1100	1778

Output #3**Output Measure**

- Facilitated Group Meetings or Conferences

Year	Target	Actual
2007	7	0

Output #4**Output Measure**

- Demonstration Projects

Year	Target	Actual
2007	10	12

Output #5**Output Measure**

- Other personalized interventions or services

Year	Target	Actual
2007	100	0

Output #6**Output Measure**

- Printed material (Newsletters, Manuals, Fact sheets, Calendars)

Year	Target	Actual
2007	50	29

Output #7**Output Measure**

- Displays

Year	Target	Actual
2007	10	89

Output #8**Output Measure**

- Other Computer or web-based Based Delivery (CDs, DVDs, Pod casts)

Year	Target	Actual
2007	5	0

Output #9**Output Measure**

- Student Supervision

Year	Target	Actual
2007	{No Data Entered}	5

V(G). State Defined Outcomes**V. State Defined Outcomes Table of Content**

O No.	OUTCOME NAME
1	Percentage of participants that will increase knowledge of healthful diets and physical activity, to prevent overweight and obesity
2	Percentage of participants that will improve diet and physical activity behaviors, to prevent overweight and obesity
3	Percentage of participants that will increase knowledge to prevent obesity-related diseases, such as cardiovascular diseases, diabetes, hypertension, and diet-related cancers
4	Percentage of participants that will improve behaviors to prevent obesity-related diseases, such as cardiovascular diseases, diabetes, hypertension, and diet-related cancers
5	Percentage of participants that will increase knowledge related to youth health issues, such as obesity, inadequate physical activity, asthma, substance abuse, and sexual behaviors
6	Percentage of participants that will influence youth to improve behaviors related to youth health issues, such as obesity, inadequate physical activity, asthma, substance abuse, and sexual behaviors
7	Percentage of participants that will increase knowledge to address women's health issues, such as obesity, inadequate physical activity, cardiovascular disease, diabetes, breast cancer, reproductive health and life-cycle changes (pregnancy, menopause)
8	Percentage of participants that will improve behaviors addressing women's health issues, such as obesity, inadequate physical activity, cardiovascular disease, diabetes, breast cancer, reproductive health and life-cycle changes (pregnancy, menopause)
9	Percentage of participants that will increase knowledge of health literacy and health disparities
10	Legislators and policy makers will make decisions that help promote the health of Massachusetts residents
11	Target audiences improve behaviors to prevent diet- and physical activity-related diseases, such as heart disease, stroke, hypertension, diabetes, and diet-related cancers.
12	Target audiences improve diet and physical activity behaviors, to prevent overweight and obesity.
13	Individuals who use pesticides adopt practices that lower their risk from and exposure to pesticides and fertilizers
14	Participants will adopt safe practices related to the preparation, processing, and consumption of food
15	Target audiences will increase knowledge of healthful diets and physical activity, to prevent overweight and obesity
16	Target audiences will increase knowledge to prevent diet- and physical activity-related diseases, such as heart disease, stroke, hypertension, diabetes, and diet-related cancers

Outcome #1**1. Outcome Measures**

Percentage of participants that will increase knowledge of healthful diets and physical activity, to prevent overweight and obesity

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	50	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

{No Data Entered}

What has been done

{No Data Entered}

Results

{No Data Entered}

4. Associated Knowledge Areas

KA Code	Knowledge Area
	{No Data}

Outcome #2**1. Outcome Measures**

Percentage of participants that will improve diet and physical activity behaviors, to prevent overweight and obesity

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	40	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

{No Data Entered}

What has been done

{No Data Entered}

Results

{No Data Entered}

4. Associated Knowledge Areas

KA Code	Knowledge Area
{No Data}	

Outcome #3**1. Outcome Measures**

Percentage of participants that will increase knowledge to prevent obesity-related diseases, such as cardiovascular diseases, diabetes, hypertension, and diet-related cancers

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	50	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

{No Data Entered}

What has been done

{No Data Entered}

Results

{No Data Entered}

4. Associated Knowledge Areas

KA Code	Knowledge Area
{No Data}	

Outcome #4**1. Outcome Measures**

Percentage of participants that will improve behaviors to prevent obesity-related diseases, such as cardiovascular diseases, diabetes, hypertension, and diet-related cancers

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	40	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

{No Data Entered}

What has been done

{No Data Entered}

Results

{No Data Entered}

4. Associated Knowledge Areas**KA Code Knowledge Area**

{No Data}

Outcome #5**1. Outcome Measures**

Percentage of participants that will increase knowledge related to youth health issues, such as obesity, inadequate physical activity, asthma, substance abuse, and sexual behaviors

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	40	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

{No Data Entered}

What has been done

{No Data Entered}

Results

{No Data Entered}

4. Associated Knowledge Areas**KA Code Knowledge Area**

{No Data}

Outcome #6**1. Outcome Measures**

Percentage of participants that will influence youth to improve behaviors related to youth health issues, such as obesity, inadequate physical activity, asthma, substance abuse, and sexual behaviors

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	40	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

{No Data Entered}

What has been done

{No Data Entered}

Results

{No Data Entered}

4. Associated Knowledge Areas

KA Code	Knowledge Area
{No Data}	

Outcome #7**1. Outcome Measures**

Percentage of participants that will increase knowledge to address women's health issues, such as obesity, inadequate physical activity, cardiovascular disease, diabetes, breast cancer, reproductive health and life-cycle changes (pregnancy, menopause)

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	50	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

{No Data Entered}

What has been done

{No Data Entered}

Results

{No Data Entered}

4. Associated Knowledge Areas

KA Code	Knowledge Area
{No Data}	

Outcome #8

1. Outcome Measures

Percentage of participants that will improve behaviors addressing women's health issues, such as obesity, inadequate physical activity, cardiovascular disease, diabetes, breast cancer, reproductive health and life-cycle changes (pregnancy, menopause)

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	40	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

{No Data Entered}

What has been done

{No Data Entered}

Results

{No Data Entered}

4. Associated Knowledge Areas

KA Code	Knowledge Area
	{No Data}

Outcome #9

1. Outcome Measures

Percentage of participants that will increase knowledge of health literacy and health disparities

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	50	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

{No Data Entered}

What has been done

{No Data Entered}

Results

{No Data Entered}

4. Associated Knowledge Areas

KA Code	Knowledge Area
{No Data}	

Outcome #10**1. Outcome Measures**

Legislators and policy makers will make decisions that help promote the health of Massachusetts residents

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	5	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

{No Data Entered}

What has been done

{No Data Entered}

Results

{No Data Entered}

4. Associated Knowledge Areas

KA Code	Knowledge Area
{No Data}	

Outcome #11**1. Outcome Measures**

Target audiences improve behaviors to prevent diet- and physical activity-related diseases, such as heart disease, stroke, hypertension, diabetes, and diet-related cancers.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	{No Data Entered}	105

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Making adjustments to adopt healthy behaviors such as eating nutritious food and being physically active can lead to a longer and more productive life; it can also prevent the harmful effect of many chronic diseases. Creating healthy behaviors during childhood is extremely important for future health. Chronic diseases such as heart disease, diabetes, and cancer are the leading causes of disability and death in the United States. Although chronic diseases are among the most common and costly, they are also among the most preventable. Overweight and obesity have reached epidemic proportions in the U.S, affecting not only adults but also children and adolescents. Lack of physical activity contributes greatly to this health problem. Overweight, obesity and lack of physical activity increase the risk of heart disease, diabetes, stroke, hypertension, and some cancers.

What has been done

In the area of health and nutrition, UMass Extension works primarily with low-income adults and youth who are receiving or eligible for food stamps, teaching USDA's MyPyramid and Dietary Guidelines for Americans, offering a variety of workshops, demonstrations and printed materials targeted to both youth and adults.

Results

Program participants increasingly eat fruits and vegetables, whole grains, and nonfat or low-fat milk or milk products every day, are more physically active every day as part of a healthy lifestyle.

4. Associated Knowledge Areas

KA Code	Knowledge Area
724	Healthy Lifestyle
703	Nutrition Education and Behavior

Outcome #12

1. Outcome Measures

Target audiences improve diet and physical activity behaviors, to prevent overweight and obesity.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	{No Data Entered}	1684

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
724	Healthy Lifestyle
703	Nutrition Education and Behavior

Outcome #13

1. Outcome Measures

Individuals who use pesticides adopt practices that lower their risk from and exposure to pesticides and fertilizers

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	{No Data Entered}	6150

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)****What has been done****Results****4. Associated Knowledge Areas**

KA Code	Knowledge Area
723	Hazards to Human Health and Safety

Outcome #14**1. Outcome Measures**

Participants will adopt safe practices related to the preparation, processing, and consumption of food

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	{No Data Entered}	739

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)****What has been done****Results****4. Associated Knowledge Areas**

KA Code	Knowledge Area
703	Nutrition Education and Behavior
723	Hazards to Human Health and Safety

Outcome #15

1. Outcome Measures

Target audiences will increase knowledge of healthful diets and physical activity, to prevent overweight and obesity

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	{No Data Entered}	26

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
703	Nutrition Education and Behavior
724	Healthy Lifestyle

Outcome #16**1. Outcome Measures**

Target audiences will increase knowledge to prevent diet- and physical activity-related diseases, such as heart disease, stroke, hypertension, diabetes, and diet-related cancers

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	{No Data Entered}	16

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
703	Nutrition Education and Behavior
724	Healthy Lifestyle

V(H). Planned Program (External Factors)**External factors which affected outcomes**

- Natural Disasters (drought,weather extremes,etc.)
- Economy
- Appropriations changes
- Public Policy changes
- Government Regulations
- Competing Public priorities
- Competing Programmatic Challenges
- Populations changes (immigration,new cultural groupings,etc.)

Brief Explanation**V(I). Planned Program (Evaluation Studies and Data Collection)****1. Evaluation Studies Planned**

- After Only (post program)
- Retrospective (post program)
- Before-After (before and after program)

Evaluation Results**Key Items of Evaluation**

Program #5

V(A). Planned Program (Summary)

1. Name of the Planned Program

Land Use Management

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
131	Alternative Uses of Land	30%			
605	Natural Resource and Environmental Economics	20%			
608	Community Resource Planning and Development	30%			
610	Domestic Policy Analysis	20%			
	Total	100%			

V(C). Planned Program (Inputs)

1. Actual amount of professional FTE/SYs expended this Program

Year: 2007	Extension		Research	
	1862	1890	1862	1890
Plan	2.4	0.0	0.0	0.0
Actual	7.5	0.0	0.0	0.0

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
123571	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
306354	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
379514	0	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

- Demonstrations
- Facilitated Group Meetings and Conferences
- Website
- Single Day Workshop, Class or Event
- Printed Materials
- Workshop Series or Educational Course
- Curriculum Development

2. Brief description of the target audience

Local government officials
 State and Federal legislators
 State and Federal agencies/commissions
 Working landscape stakeholders
 Development and design communities
 Large landowners
 Non-profit conservation, land use planning and community development organizations and interested professional organizations
 Educators and outreach professionals and trainers
 Consultants and professional practitioners in land use, community planning, natural and cultural resource preservation, community development
 Regional organizations
 Other stakeholders, private citizens, students, schools

V(E). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons (contacts) reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
Plan	833	500	0	0
2007	2717	18173	0	0

2. Number of Patent Applications Submitted (Standard Research Output)

Patent Applications Submitted

Year	Target
Plan:	0
2007 :	0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

	Extension	Research	Total
Plan			
2007	0	0	0

V(F). State Defined Outputs**Output Target****Output #1****Output Measure**

- Single day workshop, class or events

Year	Target	Actual
2007	15	89

Output #2**Output Measure**

- Workshop series or educational course

Year	Target	Actual
2007	60	7

Output #3**Output Measure**

- Facilitated Group Meetings or Conferences

Year	Target	Actual
2007	21	7

Output #4**Output Measure**

- Demonstration Projects

Year	Target	Actual
2007	2	9

Output #5**Output Measure**

- Site visits

Year	Target	Actual
2007	20	0

Output #6**Output Measure**

- Other personalized interventions or services

Year	Target	Actual
2007	60	0

Output #7**Output Measure**

- Printed material (Newsletters, Manuals, Fact sheets, Calendars)

Year	Target	Actual
2007	26	2

Output #8**Output Measure**

- Websites

Year	Target	Actual
2007	7	1

Output #9**Output Measure**

- Other Computer or web-based Based Delivery (CDs, DVDs, Pod casts)

Year	Target	Actual
2007	9	0

Output #10**Output Measure**

- Displays

Year	Target	Actual
2007	5	0

Output #11

Output Measure

- Curriculum Development

Year	Target	Actual
2007	{No Data Entered}	1

V(G). State Defined Outcomes**V. State Defined Outcomes Table of Content**

O No.	OUTCOME NAME
1	Number of Massachusetts zoning, planning and subdivision statutes that will allow for greater local and regional authority to apply sustainable planning tools
2	Number of local land use officials and professional planning practitioners that will apply updated master plans, zoning and subdivision regulations that put greater emphasis on sustainability and include opportunities for affordable housing
3	Number of municipal land use boards that will practice better adherence to legal and procedural standards and increase transparency in their processes
4	Number of municipal permitting bodies will better address natural resource and biodiversity protection, wetland and wildlife habitat assessment during design and permitting processes
5	Number of state and local officials will employ more environmentally sound standards of design, construction and mitigation in public facilities and transportation projects
6	Number of land use managers and farmers that will base decisions on increased understanding of biodiversity values, utilizing CAPS and other technological tools where possible
7	Number of state government, municipalities and private non-profit entities (e.g., land trusts and land stewardship organizations) that will increase the rate of land protection and the quality of land protected
8	Number of large landowners will utilize a full array of operational and disposition-with-development options to enter into voluntary conservation and limited development agreements
9	Number of land developers that will adopt more smart growth practices and more compact development patterns
10	Percentage of participants in the development and design communities that will employ design techniques that better integrate the needs of development projects with those of natural resource based businesses
11	Local land use officials and professional planning practitioners have the knowledge, skills and motivation to promote sustainability and equity through planning and regulation
12	Municipal board members with increased confidence and competence in administering land use regulations
13	Municipal boards, state and federal regulators have the knowledge, skills and motivation necessary to effectively address natural resource issues during project review and permitting processes
14	Municipal boards, state and federal regulators have the knowledge, skills and motivation necessary to effectively address water resource concerns during project review and permitting processes

Outcome #1**1. Outcome Measures**

Number of Massachusetts zoning, planning and subdivision statutes that will allow for greater local and regional authority to apply sustainable planning tools

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	5	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

{No Data Entered}

What has been done

{No Data Entered}

Results

{No Data Entered}

4. Associated Knowledge Areas

KA Code	Knowledge Area
	{No Data}

Outcome #2**1. Outcome Measures**

Number of local land use officials and professional planning practitioners that will apply updated master plans, zoning and subdivision regulations that put greater emphasis on sustainability and include opportunities for affordable housing

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	5	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

{No Data Entered}

What has been done

{No Data Entered}

Results

{No Data Entered}

4. Associated Knowledge Areas**KA Code Knowledge Area**

{No Data}

Outcome #3**1. Outcome Measures**

Number of municipal land use boards that will practice better adherence to legal and procedural standards and increase transparency in their processes

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	5	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

{No Data Entered}

What has been done

{No Data Entered}

Results

{No Data Entered}

4. Associated Knowledge Areas**KA Code Knowledge Area**

{No Data}

Outcome #4**1. Outcome Measures**

Number of municipal permitting bodies will better address natural resource and biodiversity protection, wetland and wildlife habitat assessment during design and permitting processes

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	5	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

{No Data Entered}

What has been done

{No Data Entered}

Results

{No Data Entered}

4. Associated Knowledge Areas

KA Code	Knowledge Area
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{No Data}	
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Outcome #5

1. Outcome Measures

Number of state and local officials will employ more environmentally sound standards of design, construction and mitigation in public facilities and transportation projects

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	5	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

{No Data Entered}

What has been done

{No Data Entered}

Results

{No Data Entered}

4. Associated Knowledge Areas

KA Code	Knowledge Area
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{No Data}	
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Outcome #6

1. Outcome Measures

Number of land use managers and farmers that will base decisions on increased understanding of biodiversity values, utilizing CAPS and other technological tools where possible

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	5	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

{No Data Entered}

What has been done

{No Data Entered}

Results

{No Data Entered}

4. Associated Knowledge Areas

KA Code	Knowledge Area
{No Data}	

Outcome #7**1. Outcome Measures**

Number of state government, municipalities and private non-profit entities (e.g., land trusts and land stewardship organizations) that will increase the rate of land protection and the quality of land protected

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	5	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

{No Data Entered}

What has been done

{No Data Entered}

Results

{No Data Entered}

4. Associated Knowledge Areas

KA Code	Knowledge Area
{No Data}	

Outcome #8

1. Outcome Measures

Number of large landowners will utilize a full array of operational and disposition-with-development options to enter into voluntary conservation and limited development agreements

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	5	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

{No Data Entered}

What has been done

{No Data Entered}

Results

{No Data Entered}

4. Associated Knowledge Areas

KA Code	Knowledge Area
	{No Data}

Outcome #9

1. Outcome Measures

Number of land developers that will adopt more smart growth practices and more compact development patterns

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	5	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

{No Data Entered}

What has been done

{No Data Entered}

Results

{No Data Entered}

4. Associated Knowledge Areas

KA Code	Knowledge Area
{No Data}	

Outcome #10**1. Outcome Measures**

Percentage of participants in the development and design communities that will employ design techniques that better integrate the needs of development projects with those of natural resource based businesses

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	40	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

{No Data Entered}

What has been done

{No Data Entered}

Results

{No Data Entered}

4. Associated Knowledge Areas

KA Code	Knowledge Area
{No Data}	

Outcome #11**1. Outcome Measures**

Local land use officials and professional planning practitioners have the knowledge, skills and motivation to promote sustainability and equity through planning and regulation

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	{No Data Entered}	543

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

What has been done**Results****4. Associated Knowledge Areas**

KA Code	Knowledge Area
608	Community Resource Planning and Development
610	Domestic Policy Analysis

Outcome #12**1. Outcome Measures**

Municipal board members with increased confidence and competence in administering land use regulations

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	{No Data Entered}	355

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Massachusetts is the third most densely populated state in the nation. The rate of land consumption for residential development is steadily increasing far out of proportion to its population growth, and not surprisingly, the state ranks among the lowest in terms of housing affordability. Haphazard growth has impacted water resources, natural resource-based enterprises, open space, wildlife habitat, and community character. Land use planning tools and practices applied toward future development are critically important, given the conflicting pressures between maintaining viable ecosystems, protecting natural resources as a basis for economic development and quality of life, and providing affordable housing.

What has been done

UMASS Extension/NREC functions as a facilitator, educator and outreach coordinator not only to individuals, but to communities and organizations who have the ability to affect change. This will involve the development of new tools, the training of relevant audiences, and the evolution of new methods of delivery and the assessment of the effectiveness of these activities. Programs have also focused on assisting municipal boards to improve their adherence to legal and procedural standards and the transparency of their process. Developers are educated and encouraged to utilize more efficient and better protective design practices; local boards are informed and encouraged to more comprehensively address natural resource issues and biodiversity during design and permitting processes. UMASS Extension/NREC also supports state and federal government agencies, municipalities, non-profits and landowners in increasing the rate of land protection and the quality of the land being protected.

Results**4. Associated Knowledge Areas**

KA Code	Knowledge Area
131	Alternative Uses of Land
608	Community Resource Planning and Development

Outcome #13

1. Outcome Measures

Municipal boards, state and federal regulators have the knowledge, skills and motivation necessary to effectively address natural resource issues during project review and permitting processes

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	{No Data Entered}	248

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
608	Community Resource Planning and Development

Outcome #14

1. Outcome Measures

Municipal boards, state and federal regulators have the knowledge, skills and motivation necessary to effectively address water resource concerns during project review and permitting processes

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	{No Data Entered}	160

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
608	Community Resource Planning and Development
605	Natural Resource and Environmental Economics

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Natural Disasters (drought,weather extremes,etc.)
- Economy
- Appropriations changes
- Public Policy changes
- Government Regulations
- Competing Public priorities
- Competing Programmatic Challenges
- Populations changes (immigration,new cultural groupings,etc.)

Brief Explanation

V(I). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned

- After Only (post program)
- Retrospective (post program)

Evaluation Results

Key Items of Evaluation

Program #6

V(A). Planned Program (Summary)

1. Name of the Planned Program

Natural Resource-Based Economic Development

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
123	Management and Sustainability of Forest Resources	25%			
131	Alternative Uses of Land	15%			
133	Pollution Prevention and Mitigation	20%			
605	Natural Resource and Environmental Economics	25%			
608	Community Resource Planning and Development	15%			
	Total	100%			

V(C). Planned Program (Inputs)

1. Actual amount of professional FTE/SYs expended this Program

Year: 2007	Extension		Research	
	1862	1890	1862	1890
Plan	14.3	0.0	0.0	0.0
Actual	13.1	0.0	0.0	0.0

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
216249	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
536120	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
664149	0	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

- Facilitated Group Meetings and Conferences
- Consultations and Site Visits
- Single Day Workshop, Class or Event
- Website
- Diagnostic Service
- Printed Materials
- Demonstrations
- Scholarly Presentations
- Teaching – Guest Lecture
- Printed Scholarly Materials

2. Brief description of the target audience

- Farmers •Landowners •Resource Managers •Horticultural Green Industry businesses and personnel
- Professional Organizations and Industry Groups •Natural Resource Agencies •Municipalities •Land Trusts and Conservation Groups

V(E). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons (contacts) reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
Plan	16410	104256	50	0
2007	28860	180410	556	0

2. Number of Patent Applications Submitted (Standard Research Output)

Patent Applications Submitted

Year	Target
Plan:	0
2007 :	0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

	Extension	Research	Total
Plan			
2007	2	0	325

V(F). State Defined Outputs**Output Target****Output #1****Output Measure**

- Single day workshop, class or events

Year	Target	Actual
2007	40	5

Output #2**Output Measure**

- Workshop series or educational course

Year	Target	Actual
2007	150	2

Output #3**Output Measure**

- Facilitated Group Meetings or Conferences

Year	Target	Actual
2007	140	51

Output #4**Output Measure**

- Demonstration Projects

Year	Target	Actual
2007	12	60

Output #5**Output Measure**

- Diagnostic Services

Year	Target	Actual
2007	700	375

Output #6**Output Measure**

- Site visits

Year	Target	Actual
2007	55	0

Output #7**Output Measure**

- Other personalized interventions or services

Year	Target	Actual
2007	665	0

Output #8**Output Measure**

- Printed material (Newsletters, Manuals, Fact sheets, Calendars)

Year	Target	Actual
2007	140	31

Output #9**Output Measure**

- Displays

Year	Target	Actual
2007	5	0

Output #10**Output Measure**

- Websites

Year	Target	Actual
2007	16	50

Output #11**Output Measure**

- Other Computer or web-based Based Delivery (CDs, DVDs, Pod casts)

Year	Target	Actual
2007	60	0

Output #12**Output Measure**

- Consultations and Site Visits

Year	Target	Actual
2007	{No Data Entered}	492

Output #13**Output Measure**

- Teaching - Lectures

Year	Target	Actual
2007	{No Data Entered}	7

Output #14**Output Measure**

- Scholarship - Printed Material

Year	Target	Actual
2007	{No Data Entered}	1

V(G). State Defined Outcomes**V. State Defined Outcomes Table of Content**

O No.	OUTCOME NAME
1	Percentage of participants that will adopt practices that protect land and water (marine and inland) resources
2	Percentage of participants that will adopt practices that ensure economically viability
3	Percentage of participants that will adopt practices that ensure ecological sustainability
4	Sales of products and services that are grown or produced in Massachusetts will increase
5	Natural Resource-based businesses and landowners adopt practices that ensure economic viability
6	Natural Resource-based businesses and landowners adopt practices that protect land and water (marine and inland) resources
7	Natural Resource-based businesses and landowners acquire knowledge and skills to ensure ecological sustainability
8	Natural Resource-based businesses and landowners acquire the knowledge and skills to prevent and reduce threats to water quality and quantity, and protect and restore water resource

Outcome #1**1. Outcome Measures**

Percentage of participants that will adopt practices that protect land and water (marine and inland) resources

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	30	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

{No Data Entered}

What has been done

{No Data Entered}

Results

{No Data Entered}

4. Associated Knowledge Areas

KA Code	Knowledge Area
	{No Data}

Outcome #2**1. Outcome Measures**

Percentage of participants that will adopt practices that ensure economically viability

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	40	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

{No Data Entered}

What has been done

{No Data Entered}

Results

{No Data Entered}

4. Associated Knowledge Areas

KA Code	Knowledge Area
{No Data}	

Outcome #3**1. Outcome Measures**

Percentage of participants that will adopt practices that ensure ecological sustainability

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	30	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

{No Data Entered}

What has been done

{No Data Entered}

Results

{No Data Entered}

4. Associated Knowledge Areas

KA Code	Knowledge Area
{No Data}	

Outcome #4**1. Outcome Measures**

Sales of products and services that are grown or produced in Massachusetts will increase

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

{No Data Entered}

What has been done

{No Data Entered}

Results

{No Data Entered}

4. Associated Knowledge Areas**KA Code Knowledge Area**

{No Data}

Outcome #5**1. Outcome Measures**

Natural Resource-based businesses and landowners adopt practices that ensure economic viability

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	{No Data Entered}	4

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Massachusetts relies on its forests, soils, waters, and scenic landscapes to provide the much-needed employment, income, products, recreation and ecosystem services that meet its citizens' needs and drive its healthy local economies. Maintaining a healthy local economy is a major concern for many communities in Massachusetts and the value of their natural resources serves as a major incentive for their conservation. Natural resource-based businesses (agriculture, equine industries, forest based businesses, fishing, shellfish, outdoor recreation and tourism, horticultural green industries, and turf) can have a substantial, positive impact on the health of local economies and are important tools for maintaining open space.

What has been done

The University of Massachusetts serves a primary role in delivering education to target audiences, informing policy decisions, and generating applied research critical to the health of natural resource based businesses in Massachusetts and their associated public benefits

Results

Program participants have developed and maintained operations resilient to changing economic, ecologic and social conditions of Massachusetts.

4. Associated Knowledge Areas

KA Code	Knowledge Area
608	Community Resource Planning and Development
605	Natural Resource and Environmental Economics
131	Alternative Uses of Land
123	Management and Sustainability of Forest Resources

Outcome #6**1. Outcome Measures**

Natural Resource-based businesses and landowners adopt practices that protect land and water (marine and inland) resources

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	{No Data Entered}	600

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)****What has been done****Results****4. Associated Knowledge Areas**

KA Code	Knowledge Area
608	Community Resource Planning and Development
123	Management and Sustainability of Forest Resources
605	Natural Resource and Environmental Economics

Outcome #7**1. Outcome Measures**

Natural Resource-based businesses and landowners acquire knowledge and skills to ensure ecological sustainability

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	{No Data Entered}	2240

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)****What has been done****Results****4. Associated Knowledge Areas**

KA Code	Knowledge Area
123	Management and Sustainability of Forest Resources
608	Community Resource Planning and Development

Outcome #8**1. Outcome Measures**

Natural Resource-based businesses and landowners acquire the knowledge and skills to prevent and reduce threats to water quality and quantity, and protect and restore water resource

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	{No Data Entered}	50

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
608	Community Resource Planning and Development
605	Natural Resource and Environmental Economics
133	Pollution Prevention and Mitigation

V(H). Planned Program (External Factors)**External factors which affected outcomes**

- Natural Disasters (drought,weather extremes,etc.)
- Economy
- Appropriations changes
- Public Policy changes
- Government Regulations
- Competing Programmatic Challenges
- Populations changes (immigration,new cultural groupings,etc.)

Brief Explanation**V(I). Planned Program (Evaluation Studies and Data Collection)****1. Evaluation Studies Planned**

- After Only (post program)
- Retrospective (post program)

Evaluation Results

Key Items of Evaluation

Program #7

V(A). Planned Program (Summary)

1. Name of the Planned Program

Water Resource Protection

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
111	Conservation and Efficient Use of Water	20%			
112	Watershed Protection and Management	40%			
133	Pollution Prevention and Mitigation	20%			
135	Aquatic and Terrestrial Wildlife	20%			
	Total	100%			

V(C). Planned Program (Inputs)

1. Actual amount of professional FTE/SYs expended this Program

Year: 2007	Extension		Research	
	1862	1890	1862	1890
Plan	7.0	0.0	0.0	0.0
Actual	4.8	0.0	0.0	0.0

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
80321	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
199130	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
246684	0	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

Activities

- Printed Materials

- Demonstrations

- Scholarly Presentations

- Consultations and Site Visits

- Websites

- Single Day Workshop, Class or Event

- Displays

- Facilitated Group Meetings and Conferences

2. Brief description of the target audience

•Farmers •Horticultural Green Industry businesses and personnel (landscape, lawn care, golf, athletic field, public and private school and facilities, municipalities and other publicly owned properties) •Land owners and Land Managers •Natural Resource Farmers •Natural Resource Agencies •Municipalities •Environmental Protection Groups and Organizations •Professional Organizations and Industry Groups •Business/Industry

V(E). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons (contacts) reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
Plan	1639	890	750	0
2007	7658	1050	133	0

2. Number of Patent Applications Submitted (Standard Research Output)

Patent Applications Submitted

Year	Target
Plan:	0
2007 :	0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

	Extension	Research	Total
Plan			
2007	2	0	3500

V(F). State Defined Outputs

Output Target

Output #1**Output Measure**

- Single day workshop, class or events

Year	Target	Actual
2007	29	8

Output #2**Output Measure**

- Workshop series or educational course

Year	Target	Actual
2007	140	0

Output #3**Output Measure**

- Facilitated Group Meetings or Conferences

Year	Target	Actual
2007	150	4

Output #4**Output Measure**

- Demonstration Projects

Year	Target	Actual
2007	2	44

Output #5**Output Measure**

- Diagnostic Services

Year	Target	Actual
2007	100	0

Output #6**Output Measure**

- Site visits

Year	Target	Actual
2007	25	0

Output #7**Output Measure**

- Other personalized interventions or services

Year	Target	Actual
2007	585	0

Output #8**Output Measure**

- Printed material (Newsletters, Manuals, Fact sheets, Calendars)

Year	Target	Actual
2007	134	12

Output #9**Output Measure**

- Displays

Year	Target	Actual
2007	5	3

Output #10**Output Measure**

- Websites

Year	Target	Actual
2007	17	7

Output #11**Output Measure**

- Other Computer or web-based Based Delivery (CDs, DVDs, Pod casts)

Year	Target	Actual
2007	65	0

Output #12**Output Measure**

- Scholarly Presentations

Year	Target	Actual
2007	{No Data Entered}	2

Output #13**Output Measure**

- Consultations and Site Visits

Year	Target	Actual
2007	{No Data Entered}	93

V(G). State Defined Outcomes**V. State Defined Outcomes Table of Content**

O No.	OUTCOME NAME
1	Land use planning adopts appropriate zoning, bylaws, and regulations that allow economic development without compromising environmental quality
2	Number of development projects (through their review and permitting) that will minimize impacts on water resources and ecosystems
3	Number of agencies, organizations and communities that will implement strategic land conservation programs that protect water resources and ecosystems
4	Number of public and private land managers and natural resources based businesses that will use practices that prevent and reduce threats to water quality and quantity, and protect and restore water resources
5	Number of water suppliers that will adopt practices to ensure adequate supplies of high quality drinking water
6	Number of water suppliers, dam operators, and industrial water users that will adopt practices that protect aquatic and wetland ecosystems
7	Participants acquire the knowledge and skills to prevent and reduce threats to water quality and quantity, and protect and restore water resources

Outcome #1**1. Outcome Measures**

Land use planning adopts appropriate zoning, bylaws, and regulations that allow economic development without compromising environmental quality

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

{No Data Entered}

What has been done

{No Data Entered}

Results

{No Data Entered}

4. Associated Knowledge Areas

KA Code	Knowledge Area
{No Data}	

Outcome #2**1. Outcome Measures**

Number of development projects (through their review and permitting) that will minimize impacts on water resources and ecosystems

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	5	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

{No Data Entered}

What has been done

{No Data Entered}

Results

{No Data Entered}

4. Associated Knowledge Areas

KA Code	Knowledge Area
{No Data}	

Outcome #3**1. Outcome Measures**

Number of agencies, organizations and communities that will implement strategic land conservation programs that protect water resources and ecosystems

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	5	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

{No Data Entered}

What has been done

{No Data Entered}

Results

{No Data Entered}

4. Associated Knowledge Areas

KA Code	Knowledge Area
{No Data}	

Outcome #4**1. Outcome Measures**

Number of public and private land managers and natural resources based businesses that will use practices that prevent and reduce threats to water quality and quantity, and protect and restore water resources

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	5	950

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Adequate supplies of clean water are critical to public health and quality of life, food and fiber production, maintenance of healthy terrestrial, wetland and aquatic ecosystems, and economic sustainability of Massachusetts communities. Water resources are affected by a wide range of activities including development, storm water management, agricultural and natural resources based business activities, water withdrawals, and industrial activities. The impacts of various land uses have degraded water quality in lakes, ponds, rivers, streams, estuaries, bays, salt ponds and groundwater, and threaten local and regional economies, including those based on recreational and commercial fisheries. For most water bodies, water quality data are generally lacking or are insufficient for assessing threats to human health and aquatic ecosystems.

What has been done

Extension has conducted workshops and provided related support on monitoring watershed ecosystem health, with a particular emphasis on invasive species monitoring, and on using resulting data in local and state decision making forums related to water resources protection. These services were provided in coordination with staff of the Massachusetts Department of Conservation and Recreation's Lakes and Ponds Program. In addition, Extension continues its ongoing collaboration with other members of the New England Regional Monitoring Collaborative, to serve as an informal liaison between federal and state agencies and the volunteer water monitoring community, and to provide sustained, reliable, and uniform assistance to that community.

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
135	Aquatic and Terrestrial Wildlife
112	Watershed Protection and Management
133	Pollution Prevention and Mitigation
111	Conservation and Efficient Use of Water

Outcome #5

1. Outcome Measures

Number of water suppliers that will adopt practices to ensure adequate supplies of high quality drinking water

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	3	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

{No Data Entered}

What has been done

{No Data Entered}

Results

{No Data Entered}

4. Associated Knowledge Areas

KA Code	Knowledge Area
	{No Data}

Outcome #6

1. Outcome Measures

Number of water suppliers, dam operators, and industrial water users that will adopt practices that protect aquatic and wetland ecosystems

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	4	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

{No Data Entered}

What has been done

{No Data Entered}

Results

{No Data Entered}

4. Associated Knowledge Areas

KA Code	Knowledge Area
{No Data}	

Outcome #7**1. Outcome Measures**

Participants acquire the knowledge and skills to prevent and reduce threats to water quality and quantity, and protect and restore water resources

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	{No Data Entered}	2167

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)****What has been done****Results**

4. Associated Knowledge Areas

KA Code	Knowledge Area
133	Pollution Prevention and Mitigation
135	Aquatic and Terrestrial Wildlife
112	Watershed Protection and Management
111	Conservation and Efficient Use of Water

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Appropriations changes
- Public Policy changes
- Government Regulations
- Competing Public priorities
- Competing Programmatic Challenges
- Populations changes (immigration, new cultural groupings, etc.)

Brief Explanation

V(I). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned

- Retrospective (post program)

Evaluation Results

Key Items of Evaluation

Program #8

V(A). Planned Program (Summary)

1. Name of the Planned Program

Youth Development and Engagement

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
724	Healthy Lifestyle	10%			
805	Community Institutions, Health, and Social Services	30%			
806	Youth Development	60%			
	Total	100%			

V(C). Planned Program (Inputs)

1. Actual amount of professional FTE/SYs expended this Program

Year: 2007	Extension		Research	
	1862	1890	1862	1890
Plan	15.9	0.0	0.0	0.0
Actual	12.2	0.0	0.0	0.0

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
369404	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
462035	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
495309	0	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

- Facilitated Group Meetings and Conferences
- Printed Materials
- 4H Clubs and Other 4H Events
- Websites
- Single Day Workshop, Class or Event
- Consultations and Site Visits
- Workshop Series or Educational Course
- Displays
- Curriculum Development
- Other Computer or Web-based Delivery (CDs, DVDs, Podcasts)

2. Brief description of the target audience

- Youth from all backgrounds •Adults from all backgrounds (volunteers, parents, collaborating organization staff)
- Youth Serving Organizations and Programs from diverse communities (including K-12, Home Schooled youth, and Camps) •Community Coalitions •UMass Amherst Faculty •Faculty from other colleges and universities

V(E). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons (contacts) reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
Plan	5081	32943	7662	48925
2007	2551	71716	5056	10579

2. Number of Patent Applications Submitted (Standard Research Output)

Patent Applications Submitted

Year	Target
Plan:	0
2007 :	0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

	Extension	Research	Total
Plan			
2007	0	0	0

V(F). State Defined Outputs**Output Target****Output #1****Output Measure**

- Single day workshop, class or events

Year	Target	Actual
2007	33	65

Output #2**Output Measure**

- Workshop series or educational course

Year	Target	Actual
2007	550	99

Output #3**Output Measure**

- Facilitated Group Meetings or Conferences

Year	Target	Actual
2007	19	87

Output #4**Output Measure**

- Diagnostic Services

Year	Target	Actual
2007	0	0

Output #5**Output Measure**

- Site visits

Year	Target	Actual
2007	20	0

Output #6**Output Measure**

- Other personalized interventions or services

Year	Target	Actual
2007	40	0

Output #7**Output Measure**

- Printed material (Newsletters, Manuals, Fact sheets, Calendars)

Year	Target	Actual
2007	35	164

Output #8**Output Measure**

- Websites

Year	Target	Actual
2007	2	1

Output #9**Output Measure**

- Other Computer or web-based Based Delivery (CDs, DVDs, Pod casts)

Year	Target	Actual
2007	0	2

Output #10**Output Measure**

- Displays

Year	Target	Actual
2007	10	74

Output #11**Output Measure**

- 4H Clubs and Other 4H Events

Year	Target	Actual
2007	{No Data Entered}	247

Output #12**Output Measure**

- Consultations and Site Visits

Year	Target	Actual
2007	{No Data Entered}	6

Output #13**Output Measure**

- Curriculum Development

Year	Target	Actual
2007	{No Data Entered}	1

V(G). State Defined Outcomes**V. State Defined Outcomes Table of Content**

O No.	OUTCOME NAME
1	Percentage of participating youth that will work with, learn from and value others from diverse backgrounds
2	Percentage of participating youth that will engage in community service learning
3	Percentage of participating youth that will practice competent, applied science (e.g., animal husbandry, horticulture, and stewardship of ecological systems)
4	Percentage of participating youth that will make healthy food and physical activity choices
5	Percentage of participating youth that will be effective in planning, organizing, resource management and record keeping (including financial record keeping)
6	Percentage of participating youth that will be effective team members, communicators, and leaders
7	Percentage of participating youth that will build successful partnerships with adults
8	Percentage of participating youth that will adopt behaviors that will help them succeed academically and in the workplace
9	Percentage of participants who will make effective use of youth development best practices
10	Youth are effective team members, communicators, and leaders
11	Youth engage in community service learning
12	Youth adopt behaviors that help them succeed academically and in the workplace
13	Youth develop knowledge and skills that help them succeed academically
14	Youth develop the knowledge and skill needed to engage in community service learning
15	Youth develop the knowledge and skills needed to practice competent, applied science.
16	Youth increase skills for acquiring and maintaining employment.
17	Youth increase their communication skills
18	Youth increase their knowledge of the components of effective leadership
19	Youth increase their team membership skills

Outcome #1**1. Outcome Measures**

Percentage of participating youth that will work with, learn from and value others from diverse backgrounds

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	50	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

{No Data Entered}

What has been done

{No Data Entered}

Results

{No Data Entered}

4. Associated Knowledge Areas

KA Code	Knowledge Area
{No Data}	

Outcome #2**1. Outcome Measures**

Percentage of participating youth that will engage in community service learning

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	30	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

{No Data Entered}

What has been done

{No Data Entered}

Results

{No Data Entered}

4. Associated Knowledge Areas

KA Code	Knowledge Area
{No Data}	

Outcome #3**1. Outcome Measures**

Percentage of participating youth that will practice competent, applied science (e.g., animal husbandry, horticulture, and stewardship of ecological systems)

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	35	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

{No Data Entered}

What has been done

{No Data Entered}

Results

{No Data Entered}

4. Associated Knowledge Areas

KA Code	Knowledge Area
{No Data}	

Outcome #4**1. Outcome Measures**

Percentage of participating youth that will make healthy food and physical activity choices

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	40	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

{No Data Entered}

What has been done

{No Data Entered}

Results

{No Data Entered}

4. Associated Knowledge Areas**KA Code Knowledge Area**

{No Data}

Outcome #5**1. Outcome Measures**

Percentage of participating youth that will be effective in planning, organizing, resource management and record keeping (including financial record keeping)

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	40	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

{No Data Entered}

What has been done

{No Data Entered}

Results

{No Data Entered}

4. Associated Knowledge Areas**KA Code Knowledge Area**

{No Data}

Outcome #6**1. Outcome Measures**

Percentage of participating youth that will be effective team members, communicators, and leaders

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	40	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

{No Data Entered}

What has been done

{No Data Entered}

Results

{No Data Entered}

4. Associated Knowledge Areas

KA Code	Knowledge Area
{No Data}	

Outcome #7**1. Outcome Measures**

Percentage of participating youth that will build successful partnerships with adults

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	40	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

{No Data Entered}

What has been done

{No Data Entered}

Results

{No Data Entered}

4. Associated Knowledge Areas

KA Code	Knowledge Area
{No Data}	

Outcome #8**1. Outcome Measures**

Percentage of participating youth that will adopt behaviors that will help them succeed academically and in the workplace

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	45	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

{No Data Entered}

What has been done

{No Data Entered}

Results

{No Data Entered}

4. Associated Knowledge Areas

KA Code	Knowledge Area
{No Data}	

Outcome #9

1. Outcome Measures

Percentage of participants who will make effective use of youth development best practices

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	40	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

{No Data Entered}

What has been done

{No Data Entered}

Results

{No Data Entered}

4. Associated Knowledge Areas

KA Code	Knowledge Area
{No Data}	

Outcome #10**1. Outcome Measures**

Youth are effective team members, communicators, and leaders

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	{No Data Entered}	906

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

The principles of youth development suggest that all youth must have a combination of the following: access to resources that promote optimal physical and mental health; nurturing relationships with adults and positive relationships with peers; safe places for living, learning and working; educational and economic opportunity; and structured activities and the opportunity for community service and civic participation (MA Department of Public Health, 2003). According to a National report entitled Eight Essential Elements for 4-H, (1999) effective youth programs must also ensure inclusive environments for all youth, as well as opportunities for mastery and active participation in determining one's future.

What has been done

The principles of youth development suggest that all youth must have a combination of the following: access to resources that promote optimal physical and mental health; nurturing relationships with adults and positive relationships with peers; safe places for living, learning and working; educational and economic opportunity; and structured activities and the opportunity for community service and civic participation (MA Department of Public Health, 2003). According to a National report entitled Eight Essential Elements for 4-H, (1999) effective youth programs must also ensure inclusive environments for all youth, as well as opportunities for mastery and active participation in determining one's future.

Results

Young people learn through the UMass Extension youth programs. When you read the 4-H Records youth have compiled or see them give a public presentation, you can clearly see the life skills they have gained.

4. Associated Knowledge Areas

KA Code	Knowledge Area
805	Community Institutions, Health, and Social Services
806	Youth Development

Outcome #11**1. Outcome Measures**

Youth engage in community service learning

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	{No Data Entered}	2286

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

As part of their preparation for citizenship and workforce participation, young people need to develop knowledge, skills, and attitudes for environmental stewardship, teamwork and communication, and community service. Young people are best able to achieve these outcomes in environments that offer safety, caring adults, and opportunities for authentic experience. Both in-school and out-of-school time programs must do more to provide optimum conditions for youth development. Educators and youth workers need ongoing professional development and curriculum resources for experiential learning and youth development best practices. Interested community adults need well-designed opportunities to share their expertise and passions with youth. Older youth are also a largely untapped resource for their communities and deserve opportunities to contribute in ways that will enable them to grow up to become better citizens, workers, neighbors, and parents.

What has been done

The collaboration between UMass Amherst and the Massachusetts Envirothon draws on a strong teaching base at UMass Amherst, particularly in the College of Natural Resources and Environment and the School of Education. Demonstrated faculty/staff interests include urban forestry and water resources, and community-based and project-based science education. Extension staff have cultivated strong collaborations outside the University with state and federal environmental agencies and nongovernmental organizations. The collaboration reaches a variety of educators and youth audiences, including urban audiences and youth of color, and connect them with their state university.

Results**4. Associated Knowledge Areas**

KA Code	Knowledge Area
806	Youth Development
805	Community Institutions, Health, and Social Services

Outcome #12**1. Outcome Measures**

Youth adopt behaviors that help them succeed academically and in the workplace

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	{No Data Entered}	57

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

What has been done**Results****4. Associated Knowledge Areas**

KA Code	Knowledge Area
806	Youth Development

Outcome #13**1. Outcome Measures**

Youth develop knowledge and skills that help them succeed academically

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	{No Data Entered}	78

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done**Results****4. Associated Knowledge Areas**

KA Code	Knowledge Area
806	Youth Development

Outcome #14**1. Outcome Measures**

Youth develop the knowledge and skill needed to engage in community service learning

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	{No Data Entered}	2753

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)**What has been done****Results****4. Associated Knowledge Areas**

KA Code	Knowledge Area
806	Youth Development
805	Community Institutions, Health, and Social Services

Outcome #15**1. Outcome Measures**

Youth develop the knowledge and skills needed to practice competent, applied science.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	{No Data Entered}	316

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)****What has been done****Results****4. Associated Knowledge Areas**

KA Code	Knowledge Area
805	Community Institutions, Health, and Social Services
724	Healthy Lifestyle
806	Youth Development

Outcome #16**1. Outcome Measures**

Youth increase skills for acquiring and maintaining employment.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	{No Data Entered}	58

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
724	Healthy Lifestyle
806	Youth Development
805	Community Institutions, Health, and Social Services

Outcome #17

1. Outcome Measures

Youth increase their communication skills

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	{No Data Entered}	2242

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
806	Youth Development
724	Healthy Lifestyle
805	Community Institutions, Health, and Social Services

Outcome #18

1. Outcome Measures

Youth increase their knowledge of the components of effective leadership

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	{No Data Entered}	674

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

Americans are concerned about preparing our youth for the challenges of the 21st century. While this concern has recently focused on standardized tests, academic achievement is only one component of the preparation youth need. Young people also need to develop a wide variety of life skills related to science and technology, leadership and community service. Young people are best able to develop the necessary life-skills in environments that offer safety, caring adults, and opportunities for authentic experience. Both in-school and out-of-school time programs must provide optimum conditions for youth development. Educators and youth workers need ongoing professional development and curriculum resources for experiential learning and youth development best practices. Interested community adults need well-designed opportunities to share their expertise and passions with youth.

What has been done

Animal science - Animal science activities account for approximately 75 percent of the entire 4-H program in Massachusetts, involving and engaging over 2,250 youth annually. 4-H youth who participate in animal projects are often asked to represent the state at national conferences, and many win national awards. Building upon the strength of our existing programs, the Massachusetts 4-H Animal Science Program is expanding into urban areas in an effort to increase the involvement of urban youth in the study of animal science.

Environmental science and stewardship - Currently, our major environmental science and stewardship efforts are the Boston Urban Stewards program, the Massachusetts Envirothon/CNRE collaboration, and the Beachcomber Trailer. Staff engaged in environmental youth development efforts have also cultivated strong collaborations outside the University, for example with community organizations in Boston (Boston Urban Stewards), and with environmental agencies and NGOs (Mass Envirothon). Current environmental stewardship programs are leaders in the area of documenting youth development outcomes for UMass Extension. These programs are also well positioned in terms of outreach to diverse, urban audiences.

Results**4. Associated Knowledge Areas**

KA Code	Knowledge Area
806	Youth Development
805	Community Institutions, Health, and Social Services

Outcome #19**1. Outcome Measures**

Youth increase their team membership skills

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	{No Data Entered}	58

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)****What has been done****Results****4. Associated Knowledge Areas**

KA Code	Knowledge Area
806	Youth Development
805	Community Institutions, Health, and Social Services
724	Healthy Lifestyle

V(H). Planned Program (External Factors)**External factors which affected outcomes**

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Appropriations changes
- Public Policy changes
- Government Regulations
- Competing Public priorities
- Competing Programmatic Challenges
- Populations changes (immigration, new cultural groupings, etc.)

Brief Explanation

{No Data Entered}

V(I). Planned Program (Evaluation Studies and Data Collection)**1. Evaluation Studies Planned**

- After Only (post program)
- Retrospective (post program)

Evaluation Results**Key Items of Evaluation**

Program #9

V(A). Planned Program (Summary)

1. Name of the Planned Program

Organizational Development (Administrative Plan)

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
901	Program and Project Design, and Statistics	50%			
903	Communication, Education, and Information Delivery	50%			
	Total	100%			

V(C). Planned Program (Inputs)

1. Actual amount of professional FTE/SYs expended this Program

Year: 2007	Extension		Research	
	1862	1890	1862	1890
Plan	17.2	0.0	0.0	0.0
Actual	16.7	0.0	0.0	0.0

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
349911	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
426065	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
886270	0	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

Staff Development structures and processes to be developed include:

a. Extension-wide Staff Development Plan, to identify the staffing levels, expectations, skill sets, conferences, on going courses of study, group training and development initiatives need to enhance staff and program unit capacity to meet issue plan goals and emerging needs of UMass Extension internal and external constituencies. This includes analysis of existing and new staff positions, diversity goals attainment in recruitment, hiring, promotion of staff, and regular needs assessment for each program unit. Measures will be established to evaluate the degree of progress toward issue plan impact indicator achievement.

. Individual Development Plans, to identify individual work, skill sets and knowledge needs with each staff members job. IDP's help ensure that each program's staff has the necessary training to meet issue plan goals and delivery quality programs, information or research to its constituents. Such plans will integrate with the University's Performance Management goal setting and review system and will tie in with Extension promotion, merit and succession planning. The Individual Plan will reflect the overall strategy of the program area to meet its goals and mission and will include identification of conference opportunities and course work or credentializing opportunities.

c. ExtensionStaff Training and Development Series will make available, through needs assessment and prioritization, a series of offerings available to all Extension staff, such as customized Equal Opportunity and Diversity sessions, technology, or work process re-design training. The series will more formally utilize the University's Workplace Learning and Development offerings, and will be customized to meet each program's needs in a particular discipline or interest area.

Civil Rights structures and processes to be developed include, but are not limited to:

a. Civil Rights Plan formation, including administrative goals and action plans for programs, internal reviews, complaint procedures and assignment of EEO staffing responsibilities within Extension as reviewed in an evaluation plan.

. Revised Public Notification Plans, including new statements on all program communications, brochures, media releases, printed information, contracts and web publications, updating of mailing lists data collection on minority collaborators, publication of policies in diverse public venues, etc.

c. Data Collection by all Extension programs documenting outreach efforts to external constituencies to help ensure access by underserved, diverse communities and individuals in the state. This involves research into appropriate data collection methods (e.g., sampling, county audits;) review of marketing and programming materials, whole population analysis, observations (e.g., agendas, etc.); policy and procedure development on work with collaborators; and creation of a web data collection tool for use by Extension personnel state-wide.

d. Civil Rights Training Series for staff, advisories, youth and collaborating organizations. This would include on-line formats such as Civil Rights self-assessment tools.

e. Access to all Equal Opportunity Policies, Directives and Offices for staff and all constituencies via web based information sites and printed materials.

f. Review of Current Program Partnerships with external groups to ensure EEO compliance, including advisory nominations, compositions, by-laws provisions.

g. Recruitment, Hiring, and Succession Planning to ensure EEO considerations are met and integrated with Extension strategic and program issue plans.

h. Human Resource Policy and Procedures Review to ensure promotion, separations/retention, recruitment and hiring strategies are aligned with University policies and federal requirements.

Planning structures and processes to be developed include:

a. Extension-wide Strategic Plan, to align with the Outreach Strategic Plan, federal requirements and the CSREES Plan of Work for 2007-2011. This involves fiscal planning, examination, discussion and decision making on new cross-functional and adaptive program structures for Extension's current four programs. It may require re-definitions of priorities for Extension, new staffing assignments, organizational units and relationships with internal and external partners, faculty and audiences.

. Extension Program Strategic Plans, to better define focus areas, revenue generation and resource development strategies, and staffing requirements. These plans will contribute to accountability for and alignment of programs with overall Extension, Outreach and University strategic plans.

c. Collaborative Outreach Administrative Department Plans, to better clarify the expectations, procedures, deliverables, costs and coordination efforts with Outreach units so that Extension top priorities are met, thus ensuring high quality program delivery to Extension constituencies. The three Outreach units include the Business Services Center, Marketing and Communication (including the Book Store and Information Technology,) and Outreach Development.

2. Brief description of the target audience

UMass Extension Faculty and Staff

V(E). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons (contacts) reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
Plan	200	400	0	0
2007	120	250	0	0

2. Number of Patent Applications Submitted (Standard Research Output)

Patent Applications Submitted

Year	Target
Plan:	0
2007 :	0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

	Extension	Research	Total
Plan			
2007	0	0	0

V(F). State Defined Outputs

Output Target

Output #1**Output Measure**

- Trainings and workshops

Year	Target	Actual
2007	0	5

Output #2**Output Measure**

- Web and Print Resources

Year	Target	Actual
2007	0	18

Output #3**Output Measure**

- Committees

Year	Target	Actual
2007	0	3

Output #4**Output Measure**

- Collaborations

Year	Target	Actual
2007	0	0

Output #5**Output Measure**

- Consultations

Year	Target	Actual
2007	0	56

V(G). State Defined Outcomes**V. State Defined Outcomes Table of Content**

O No.	OUTCOME NAME
1	Extension programs are open, accessible and inclusive
2	Staff have the knowledge, skills and access to the resources necessary to ensure that programs are open, accessible and inclusive
3	Extension staff will employ a range of practices that increase their job satisfaction, personal growth and professional effectiveness in delivering quality Extension educational programs and services. Practices will reflect specific organizational professional development goals (e.g. instructional technology, customer service, volunteer management, evaluation capacity)
4	Extension staff will develop a variety of skills and abilities that are designed to meet individual and organizational professional development goals
5	Staff adopt practices that sustain current projects and initiatives in a healthy and productive manner, develop opportunities for emerging projects and initiatives and discontinue ineffective or outmoded projects and initiatives.
6	Staff have the knowledge, skills, time and support that will allow them to sustain current projects and initiatives in a healthy and productive manner, develop opportunities for emerging projects and initiatives and discontinue ineffective or outmoded projects and initiatives.

Outcome #1**1. Outcome Measures**

Extension programs are open, accessible and inclusive

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

{No Data Entered}

What has been done

{No Data Entered}

Results

{No Data Entered}

4. Associated Knowledge Areas

KA Code	Knowledge Area
	{No Data}

Outcome #2**1. Outcome Measures**

Staff have the knowledge, skills and access to the resources necessary to ensure that programs are open, accessible and inclusive

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

{No Data Entered}

What has been done

{No Data Entered}

Results

{No Data Entered}

4. Associated Knowledge Areas

KA Code	Knowledge Area
{No Data}	

Outcome #3**1. Outcome Measures**

Extension staff will employ a range of practices that increase their job satisfaction, personal growth and professional effectiveness in delivering quality Extension educational programs and services. Practices will reflect specific organizational professional development goals (e.g. instructional technology, customer service, volunteer management, evaluation capacity)

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

{No Data Entered}

What has been done

{No Data Entered}

Results

{No Data Entered}

4. Associated Knowledge Areas

KA Code	Knowledge Area
{No Data}	

Outcome #4**1. Outcome Measures**

Extension staff will develop a variety of skills and abilities that are designed to meet individual and organizational professional development goals

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	0	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

{No Data Entered}

What has been done

{No Data Entered}

Results

{No Data Entered}

4. Associated Knowledge Areas**KA Code Knowledge Area**

{No Data}

Outcome #5**1. Outcome Measures**

Staff adopt practices that sustain current projects and initiatives in a healthy and productive manner, develop opportunities for emerging projects and initiatives and discontinue ineffective or outmoded projects and initiatives.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

{No Data Entered}

What has been done

{No Data Entered}

Results

{No Data Entered}

4. Associated Knowledge Areas**KA Code Knowledge Area**

{No Data}

Outcome #6**1. Outcome Measures**

Staff have the knowledge, skills, time and support that will allow them to sustain current projects and initiatives in a healthy and productive manner, develop opportunities for emerging projects and initiatives and discontinue ineffective or outmoded projects and initiatives.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

{No Data Entered}

What has been done

{No Data Entered}

Results

{No Data Entered}

4. Associated Knowledge Areas

KA Code	Knowledge Area
{No Data}	

V(H). Planned Program (External Factors)**External factors which affected outcomes**

- Economy
- Appropriations changes
- Public Policy changes

Brief Explanation**V(I). Planned Program (Evaluation Studies and Data Collection)****1. Evaluation Studies Planned**

- After Only (post program)
- Retrospective (post program)
- Before-After (before and after program)
- Time series (multiple points before and after program)
- Case Study

Evaluation Results

{No Data Entered}

Key Items of Evaluation

{No Data Entered}

Program #10

V(A). Planned Program (Summary)

1. Name of the Planned Program

General Operations and Administration (Administrative Plan)

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
902	Administration of Projects and Programs	50%			
903	Communication, Education, and Information Delivery	50%			
	Total	100%			

V(C). Planned Program (Inputs)

1. Actual amount of professional FTE/SYs expended this Program

Year: 2007	Extension		Research	
	1862	1890	1862	1890
Plan	9.6	0.0	0.0	0.0
Actual	8.4	0.0	0.0	0.0

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
956557	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
201325	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
260315	0	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

Financial Management, includes federal and state grants, gifts, accounts, program budgets, revenue generation/fees, trust accounts, salary administration, etc. in conjunction with the Outreach Business Services Center and the UMass Treasure's Office.

Human Resource Management, includes the hiring, supervision and evaluation of professional and clerical staff and faculty, administration and communication of University HR employment policies and procedures, including performance management, civil rights, grievance and salary administration.

Legal, Risk and Volunteer Management, includes legal, liability, and volunteer policy development and research; consultation with University attorneys, risk officers and state officials; communication and enforcement of University directives and policies; creation of binding agreements (MOA's), negotiations and mediations with collaborating non-profits and governmental agencies; emergency and incident reporting; Criminal History Systems Information (CORI) screening, authorization, and investigations for all Extension youth programs; ES-237 reporting; Volunteer advisory fiscal reporting, administrative systems design and delivery.

Internal and External Relations, includes conduct of public relations with University, state, federal officials, the legislature, the Board of Public Overseers, other state Extension programs within CSREES, stakeholders and collaborating organizations, internal and external audiences in the areas of advocating for strategic initiatives and program delivery.

Program Assessment and Evaluation, includes the design of program assessment instruments, surveys, impact analysis, studies, statistical reports pertaining to Extension programs' delivery, impacts and stakeholder issues.

Marketing and Communications, in conjunction with Outreach Marketing and Communications, includes the development of brochures, newsletters, media, publications, Book Store, web communications, and information systems and data management.

Fundraising and Grant Program Development, includes oversight and coordination of grants, internal and external partnerships and special fundraising programs, relations with Extension related program foundations, working where appropriate in conjunction with Outreach Development, Advancement, federal and state agencies and the appropriate University offices.

Planning, Evaluation and Reporting includes general design and support for program planning, evaluation and reporting as well as comprehensive evaluation services for projects with substantial evaluation requirements from external sponsors and general advice and capacity building

2. Brief description of the target audience

- University Administrators
- Federal and County Extension Program Administrators (USDA/CSREES)
- UMass Extension Faculty and Staff
- Public Stakeholders

V(E). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons (contacts) reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
Plan	0	0	0	0
2007	0	0	0	0

2. Number of Patent Applications Submitted (Standard Research Output)

Patent Applications Submitted

Year	Target
Plan:	0
2007 :	0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

	Extension	Research	Total
Plan			
2007	0	0	0

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Administrative Processes

Year	Target	Actual
2007	0	0

V(G). State Defined Outcomes**V. State Defined Outcomes Table of Content**

O No.	OUTCOME NAME
1	Extension staff and faculty, receive administrative support to assist them in developing and delivering quality Extension educational programs and services
2	Staff and external partners obtain accurate and timely research and evaluation data and reports on Extension educational programs and activities to guide decision making and policy formation and demonstrate legal compliance and accountability
3	Partnering organizations, agencies, non-profits and volunteer groups are linked to Extension through clear legal and liability agreements, management and affirmative action/equal opportunity policies approved by the University and in accordance with Massachusetts and federal laws.
4	Staff and external partners receive fiscal accounting services and reports demonstrating that Extension's financial resources are lawfully administered and used for strategic priorities supporting the organization's mission
5	Diverse community members have equal access to information about and opportunities to participate in Extension programs and services
6	Internal and diverse external partners are accurately informed and involved in Extension programs, services, planning for strategic initiatives and impact assessment

Outcome #1**1. Outcome Measures**

Extension staff and faculty, receive administrative support to assist them in developing and delivering quality Extension educational programs and services

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

{No Data Entered}

What has been done

{No Data Entered}

Results

{No Data Entered}

4. Associated Knowledge Areas

KA Code	Knowledge Area
	{No Data}

Outcome #2**1. Outcome Measures**

Staff and external partners obtain accurate and timely research and evaluation data and reports on Extension educational programs and activities to guide decision making and policy formation and demonstrate legal compliance and accountability

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

{No Data Entered}

What has been done

{No Data Entered}

Results

{No Data Entered}

4. Associated Knowledge Areas**KA Code Knowledge Area**

{No Data}

Outcome #3**1. Outcome Measures**

Partnering organizations, agencies, non-profits and volunteer groups are linked to Extension through clear legal and liability agreements, management and affirmative action/equal opportunity policies approved by the University and in accordance with Massachusetts and federal laws.

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

{No Data Entered}

What has been done

{No Data Entered}

Results

{No Data Entered}

4. Associated Knowledge Areas**KA Code Knowledge Area**

{No Data}

Outcome #4**1. Outcome Measures**

Staff and external partners receive fiscal accounting services and reports demonstrating that Extension's financial resources are lawfully administered and used for strategic priorities supporting the organization's mission

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

{No Data Entered}

What has been done

{No Data Entered}

Results

{No Data Entered}

4. Associated Knowledge Areas

KA Code	Knowledge Area
{No Data}	

Outcome #5**1. Outcome Measures**

Diverse community members have equal access to information about and opportunities to participate in Extension programs and services

2. Associated Institution Types

•1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	0	0

3c. Qualitative Outcome or Impact Statement**Issue (Who cares and Why)**

{No Data Entered}

What has been done

{No Data Entered}

Results

{No Data Entered}

4. Associated Knowledge Areas

KA Code	Knowledge Area
{No Data}	

Outcome #6**1. Outcome Measures**

Internal and diverse external partners are accurately informed and involved in Extension programs, services, planning for strategic initiatives and impact assessment

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	0	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

{No Data Entered}

What has been done

{No Data Entered}

Results

{No Data Entered}

4. Associated Knowledge Areas

KA Code	Knowledge Area
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{No Data}

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Natural Disasters (drought,weather extremes,etc.)
- Economy
- Appropriations changes
- Public Policy changes
- Government Regulations

Brief Explanation

{No Data Entered}

V(I). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned

- Retrospective (post program)
- Before-After (before and after program)
- During (during program)
- Case Study
- Other (Fiscal, Legal Liability Audits)

Evaluation Results

{No Data Entered}

Key Items of Evaluation

{No Data Entered}